#### FORM 3

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT	
(highlight changes)	

	Α	PPLICAT	ION FOR	PERMIT TO	DRILL		INERAL LEASE NO: -47549	6. SURFACE: State
1A. TYPE OF WO	PRK: DF	RILL 🔽	REENTER [	DEEPEN		7. IF	INDIAN, ALLOTTEE OF	TRIBE NAME:
B. TYPE OF WE	LL: OIL	GAS 🗹	OTHER	SIN	GLE ZONE MULTIPLE ZON	√E 🚺 8. UI	NIT or CA AGREEMENT	NAME:
2. NAME OF OPE	RATOR:	****	_			9. W	ELL NAME and NUMBE	R:
	on Exploration	n Company	1			i .	orth Horseshoe	
	iana, Suite 2		on <sub>STA</sub> :	TE TX Zip 77	PHONE NUMBER: (713) 830-6800		TIELD AND POOL, OR V Indisignated	MLDCAT:
4. LOCATION OF WELL (FOOTAGES)  AT SURFACE: 781' FSL & 688' FWL  4. LOCATION OF WELL (FOOTAGES)  5. LOCATION OF WELL (FOOTAGES)  6. 248.75 \times 40. 32.2919  11. QTR/QTR, SECTION, TOWNSHIP, RAMERIDIAN:  SWSW 2 T6S 21E					OWNSHIP, RANGE,			
AT SURFACE:	781' FSL &	688' FWL	4	4644254	- 109 530191			S 21E
AT PROPOSED	PRODUCING ZON	E: Same as	s above.	(	1-1.30011			
14. DISTANCE IN	MILES AND DIREC	TION FROM NEA	REST TOWN OR PO	ST OFFICE:		12.0	COUNTY:	13. STATE:
13.8 mile	s south of Vo	ernal, UT				Ui	ntah	UTAH
15. DISTANCE TO	NEAREST PROPE	RTY OR LEASE L	INE (FEET)	16. NUMBER O	F ACRES IN LEASE:	17. NUMBE	R OF ACRES ASSIGNE	D TO THIS WELL:
688'					640			40
	NEAREST WELL (		LETED, OR	19. PROPOSED	DEPTH:	20. BOND D	ESCRIPTION:	
2,600'		•			9,400	10415	5044	
	(SHOW WHETHER	DF, RT, GR, ETC	.):		ATE DATE WORK WILL START:		TED DURATION:	
5,132' GF	<u> </u>			1/15/200	06	30 Day	ys	
24.			PROPOS	ED CASING A	ND CEMENTING PROGRAM			
SIZE OF HOLE	CASING SIZE, G	RADE, AND WEIG	SHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QL	JANTITY, YIELD	), AND SLURRY WEIGH	T
11"	9 5/8	J-55	36#	2,000	Premium Lite II	250 SK	S 3.38 C	F 11.0 PPG
					CLASS "G"	329 SK	S 1.2 C	F 15.6 PPG
					Calcium Chloride	200 SK	S 1.10 C	F 15.6 PPG
7 7/8	4 1/2	N-80	11.6#	9,400	Premium Lite II	200 SK	S 3.3 C	F 11.0 PPG
					CLASS "G"	400 SK	S 1.56 C	F 14.3 PPG
25.				ATTA	CHMENTS	ſ	NIFINE	NTIAI
VERIFY THE FOL	LOWING ARE ATT	ACHED IN ACCOR	DANCE WITH THE U	JTAH OIL AND GAS C	ONSERVATION GENERAL RULES:		<del>UITI IDE</del>	111116
<b>✓</b> WELL PL	AT OR MAP PREPA	RED BY LICENSE	D SURVEYOR OR E	NGINEER	COMPLETE DRILLING PLAN			
<b>✓</b> EVIDENC	E OF DIVISION OF	WATER RIGHTS	APPROVAL FOR US	E OF WATER	FORM 5, IF OPERATOR IS PI	ERSON OR CO	MPANY OTHER THAN 1	THE LEASE OWNER
							-	
NAME (PLEASE	PRINT) William	A Ryan	$\rightarrow$		<sub>TITLE</sub> Agent			
SIGNATURE	Wille	mà	Dyon		DATE 12:1:05			
(This space for Sta	te use only)				Approved by the	12 T	RECE	INED
			$\bigvee$	## 	Litah Division of	7.	חרר	0 9 2005
	, 1	2-11-	271/71	(	Oil, Gas and Mining		DEC	
API NUMBER AS	SIGNED: 4	3-04 1.	37476	Date	APPROVAL CO.	+	DIV. OF OIL	, GAS & MINING

(11/2001)

#### THE HOUSTON EXPLORATION COMPANY T6S, R21E, S.L.B.&M. Well location, NORTH HORSESHOE #13-2-6-21, located as shown in the SW 1/4 SW 1/4 (LOT 6) of Section 2, T6S, R21E, S.L.B.&M. Uintah County, Utah. BASIS OF ELEVATION -T5S— —N89°59' $\stackrel{!}{\mathsf{E}}$ — 7844.10' (G.L.O.)— ——N89'40'E — 2659.14' (G.L.O.)— — 1. SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 706.20 3, T6S, R21E, S.L.B.&M. TAKEN FROM THE VERNAL SE. (G.L.O.) UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC 6 MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS LOT 4 LOT 3 LOT 2 LOT 1 MARKED AS BEING 5358 FEFT. 1920 Brass Cap 1.2' High, 1920 Brass Cap Pile of Stones 1.5' High, Pile of Stones (Meas. LOT 5 2638.84 2644.03" NORTH HORSESHOE NOO.05'47"W SCALE #13-2-6-21 Elev. Ungraded Ground = 5133' THIS IS TO CERTIFY THAT THE AROYE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR DIDER MY LOT 6 SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND S89°09'27"W - 2661.58' (Meas.) S8912'05"W - 2647.25' (Meas.) 1920 Brass Cap -1920 Brass Cap 1920 Brass Cap-1.0° High. Pile 1.3' High 2.0' High, Pile of Stones of Stones BASIS OF BEARINGS UINTAH ENGINEERING & LAND SURVEYING BASIS OF BEARINGS IS A G.P.S. OBSERVATION. 85 SOUTH 200 EAST - VERNAL, UTAH 84078 (435) 789-1017 (AUTONOMOUS NAD 83) LEGEND: SCALE DATE SURVEYED: DATE DRAWN: LATITUDE = $40^{\circ}22.27$ " (40.322853) 1" = 1000'11-04-05 11-10-05 LONGITUDE = $109^{\circ}31^{\circ}51.76^{\circ}$ (109.531044) = 90° SYMBOL PARTY REFERENCES (AUTONOMOUS NAD 27) N.H. D.S. P.M. G.L.O. PLAT = PROPOSED WELL HEAD. LATITUDE = $40^{\circ}9'22.41''$ (40.322892) WEATHER LONGITUDE = $109^{\circ}31'49.27''$ (109.530353) THE HOUSTON = SECTION CORNERS LOCATED. COOL EXPLORATION COMPANY

## THE HOUSTON EXPLORATION COMPANY

NH 9-16-6-21         43-047-37439         415         514           NH 3-16-6-21         43-047-37391         415         514           NH 13-16-6-21         43-047-37575         415         514           NH 15-2-6-21         43-047-37477         415         514           NH 15-2-6-21         43-047-37476         415         514           NH 13-2-6-21         43-047-37441         499         515           NH 7-16-6-21         43-047-37441         499         515           NH 1-16-6-21         43-047-37442         499         515           NH 15-16-6-21         43-047-37442         499         515           NH 15-16-6-21         43-047-37440         499         515           NH 16-9-6-22         43-047-37392         415         515           NH 16-9-6-22         43-047-37393         415         515           NH 14-15-6-22         43-047-37394         415         515           NH 2-15-6-22         43-047-37396         415         515           NH 2-15-6-22         43-047-37463         357         526           NWH 15-36-6-23         43-047-37464         357         526           NWH 11-36-6-23         43-047-37462         357 <t< th=""><th>WELL NAME</th><th>API</th><th>LEAD</th><th>TAIL</th></t<>	WELL NAME	API	LEAD	TAIL
NH 3-16-6-21         43-047-37391         415         514           NH 13-16-6-21         43-047-37575         415         514           NH 15-2-6-21         43-047-37477         415         514           NH 13-2-6-21         43-047-37476         415         514           NH 11-16-6-21         43-047-37441         499         515           NH 7-16-6-21         43-047-37438         499         515           NH 1-16-6-21         43-047-37442         499         515           NH 15-16-6-21         43-047-37440         499         515           NH 16-9-6-22         43-047-37392         415         515           NH 16-9-6-22         43-047-37393         415         515           NH 14-10-6-22         43-047-37394         415         515           NH 2-15-6-22         43-047-37396         415         515           NH 2-15-6-22         43-047-37463         357         526           NWH 13-36-6-23         43-047-37464         357         526           NWH 11-36-6-23         43-047-37462         357         526           NWH 14-32-6-23         43-047-37478         357         526           NWH 18-32-6-23         43-047-37401         357			sks	sks
NH 13-16-6-21         43-047-37575         415         514           NH 15-2-6-21         43-047-37477         415         514           NH 13-2-6-21         43-047-37476         415         514           NH 13-2-6-21         43-047-37476         415         514           NH 11-16-6-21         43-047-37441         499         515           NH 1-16-6-21         43-047-37442         499         515           NH 15-16-6-21         43-047-373440         499         515           NH 12-7-6-22         43-047-37392         415         515           NH 16-9-6-22         43-047-37393         415         515           NH 14-10-6-22         43-047-37394         415         515           NH 2-15-6-22         43-047-37396         415         515           NH 2-15-6-22         43-047-37396         415         515           NWH 13-36-6-23         43-047-37463         357         526           NWH 11-36-6-23         43-047-37464         357         526           NWH 14-32-6-23         43-047-37462         357         526           NWH 18-32-6-23         43-047-37401         357         526           NWH 10-32-6-23         43-047-37401         357	NH 9-16-6-21	43-047-37439	415	514
NH 15-2-6-21         43-047-37477         415         514           NH 13-2-6-21         43-047-37476         415         514           NH 11-16-6-21         43-047-37441         499         515           NH 7-16-6-21         43-047-37438         499         515           NH 1-16-6-21         43-047-37442         499         515           NH 15-16-6-21         43-047-37440         499         515           NH 12-7-6-22         43-047-37392         415         515           NH 16-9-6-22         43-047-37393         415         515           NH 14-10-6-22         43-047-37394         415         515           NH 4-15-6-22         43-047-37396         415         515           NH 2-15-6-22         43-047-37396         415         515           NWH 13-36-6-23         43-047-37463         357         526           NWH 11-36-6-23         43-047-37464         357         526           NWH 14-32-6-23         43-047-37462         357         526           NWH 14-32-6-23         43-047-37401         357         526           NWH 10-32-6-23         43-047-37400         357         526           NWH 10-32-6-23         43-047-37397         357	NH 3-16-6-21	43-047-37391	415	<u>514</u>
NH 13-2-6-21         43-047-37476         415         514           NH 11-16-6-21         43-047-37441         499         515           NH 7-16-6-21         43-047-37438         499         515           NH 1-16-6-21         43-047-37442         499         515           NH 15-16-6-21         43-047-37440         499         515           NH 12-7-6-22         43-047-37392         415         515           NH 16-9-6-22         43-047-37393         415         515           NH 14-10-6-22         43-047-37394         415         515           NH 4-15-6-22         43-047-37396         415         515           NH 2-15-6-22         43-047-37396         415         515           NH 13-36-6-23         43-047-37463         357         526           NWH 15-36-6-23         43-047-37464         357         526           NWH 11-36-6-23         43-047-37462         357         526           NWH 2-32-6-23         43-047-37498         357         526           NWH 10-32-6-23         43-047-37401         357         526           NWH 10-32-6-23         43-047-37397         357         526           NWH 16-32-6-23         43-047-37398         357	NH 13-16-6-21	43-047-37575	415	514
NH 11-16-6-21         43-047-37441         499         515           NH 7-16-6-21         43-047-37438         499         515           NH 1-16-6-21         43-047-37442         499         515           NH 15-16-6-21         43-047-37440         499         515           NH 15-16-6-21         43-047-37392         415         515           NH 16-9-6-22         43-047-37393         415         515           NH 14-10-6-22         43-047-37394         415         515           NH 4-15-6-22         43-047-37396         415         515           NH 2-15-6-22         43-047-37396         415         515           NH 13-36-6-23         43-047-37463         357         526           NWH 15-36-6-23         43-047-37464         357         526           NWH 11-36-6-23         43-047-37462         357         526           NWH 2-32-6-23         43-047-37478         357         526           NWH 8-32-6-23         43-047-37401         357         526           NWH 10-32-6-23         43-047-37401         357         526           NWH 12-32-6-23         43-047-37397         357         526           NWH 16-32-6-23         43-047-37398         357	NH 15-2-6-21	43-047-37477	415	<u>514</u>
NH 7-16-6-21         43-047-37438         499         515           NH 1-16-6-21         43-047-37442         499         515           NH 15-16-6-21         43-047-37440         499         515           NH 15-16-6-21         43-047-37392         415         515           NH 16-9-6-22         43-047-37393         415         515           NH 14-10-6-22         43-047-37394         415         515           NH 4-15-6-22         43-047-37396         415         515           NH 2-15-6-22         43-047-37395         415         515           NWH 13-36-6-23         43-047-37463         357         526           NWH 15-36-6-23         43-047-37464         357         526           NWH 11-36-6-23         43-047-37462         357         526           NWH 2-32-6-23         43-047-37478         357         526           NWH 8-32-6-23         43-047-37401         357         526           NWH 10-32-6-23         43-047-37400         357         526           NWH 16-32-6-23         43-047-37398         357         526           NWH 16-32-6-23         43-047-37561         153         1,050           G 16-2-6-19         43-047-37562         153	NH 13-2-6-21	43-047-37476	415	514
NH 7-16-6-21         43-047-37438         499         515           NH 1-16-6-21         43-047-37442         499         515           NH 15-16-6-21         43-047-37440         499         515           NH 15-16-6-21         43-047-37392         415         515           NH 16-9-6-22         43-047-37393         415         515           NH 14-10-6-22         43-047-37394         415         515           NH 4-15-6-22         43-047-37396         415         515           NH 2-15-6-22         43-047-37395         415         515           NWH 13-36-6-23         43-047-37463         357         526           NWH 15-36-6-23         43-047-37464         357         526           NWH 11-36-6-23         43-047-37462         357         526           NWH 2-32-6-23         43-047-37478         357         526           NWH 8-32-6-23         43-047-37401         357         526           NWH 10-32-6-23         43-047-37400         357         526           NWH 16-32-6-23         43-047-37398         357         526           NWH 16-32-6-23         43-047-37561         153         1,050           G 16-2-6-19         43-047-37562         153				
NH 1-16-6-21         43-047-37442         499         515           NH 15-16-6-21         43-047-37440         499         515           NH 15-16-6-21         43-047-37392         415         515           NH 16-9-6-22         43-047-37393         415         515           NH 14-10-6-22         43-047-37394         415         515           NH 4-15-6-22         43-047-37396         415         515           NH 2-15-6-22         43-047-37395         415         515           NWH 13-36-6-23         43-047-37463         357         526           NWH 11-36-6-23         43-047-37464         357         526           NWH 14-32-6-23         43-047-37462         357         526           NWH 2-32-6-23         43-047-37478         357         526           NWH 8-32-6-23         43-047-37401         357         526           NWH 10-32-6-23         43-047-37400         357         526           NWH 12-32-6-23         43-047-37397         357         526           NWH 16-32-6-23         43-047-37398         357         526           NWH 16-32-6-23         43-047-37561         153         1,050           G 2-2-6-19         43-047-37562         153	NH 11-16-6-21	43-047-37441	499	<u>515</u>
NH 15-16-6-21         43-047-37440         499         515           NH 12-7-6-22         43-047-37392         415         515           NH 16-9-6-22         43-047-37393         415         515           NH 14-10-6-22         43-047-37394         415         515           NH 4-15-6-22         43-047-37396         415         515           NH 2-15-6-22         43-047-37395         415         515           NWH 13-36-6-23         43-047-37463         357         526           NWH 15-36-6-23         43-047-37464         357         526           NWH 11-36-6-23         43-047-37462         357         526           NWH 14-32-6-23         43-047-37478         357         526           NWH 2-32-6-23         43-047-37490         357         526           NWH 10-32-6-23         43-047-37400         357         526           NWH 12-32-6-23         43-047-37397         357         526           NWH 16-32-6-23         43-047-37398         357         526           NWH 16-32-6-23         43-047-37561         153         1,050           G 16-2-6-19         43-047-37562         153         1,050           G 1-2-6-19         43-047-37563         153 <td>NH 7-16-6-21</td> <td>43-047-37438</td> <td>499</td> <td>515</td>	NH 7-16-6-21	43-047-37438	499	515
NH 12-7-6-22       43-047-37392       415       515         NH 16-9-6-22       43-047-37393       415       515         NH 14-10-6-22       43-047-37394       415       515         NH 4-15-6-22       43-047-37396       415       515         NH 2-15-6-22       43-047-37395       415       515         NWH 13-36-6-23       43-047-37463       357       526         NWH 15-36-6-23       43-047-37464       357       526         NWH 11-36-6-23       43-047-37462       357       526         NWH 14-32-6-23       43-047-37478       357       526         NWH 2-32-6-23       43-047-37401       357       526         NWH 8-32-6-23       43-047-37400       357       526         NWH 10-32-6-23       43-047-37397       357       526         NWH 16-32-6-23       43-047-37398       357       526         NWH 16-32-6-23       43-047-37561       153       1,050         G 16-2-6-19       43-047-37562       153       1,050         G 1-2-6-19       43-047-37563       153       1,050	NH 1-16-6-21	43-047-37442	499	<u>515</u>
NH 16-9-6-22       43-047-37393       415       515         NH 14-10-6-22       43-047-37394       415       515         NH 4-15-6-22       43-047-37396       415       515         NH 2-15-6-22       43-047-37395       415       515         NWH 13-36-6-23       43-047-37463       357       526         NWH 15-36-6-23       43-047-37464       357       526         NWH 11-36-6-23       43-047-37462       357       526         NWH 14-32-6-23       43-047-37478       357       526         NWH 2-32-6-23       43-047-37490       357       526         NWH 10-32-6-23       43-047-37400       357       526         NWH 12-32-6-23       43-047-37397       357       526         NWH 16-32-6-23       43-047-37398       357       526         NWH 16-32-6-23       43-047-37398       357       526         OC 2-2-6-19       43-047-37561       153       1,050         G 16-2-6-19       43-047-37562       153       1,050         G 1-2-6-19       43-047-37563       153       1,050	NH 15-16-6-21	43-047-37440	499	515
NH 16-9-6-22       43-047-37393       415       515         NH 14-10-6-22       43-047-37394       415       515         NH 4-15-6-22       43-047-37396       415       515         NH 2-15-6-22       43-047-37395       415       515         NWH 13-36-6-23       43-047-37463       357       526         NWH 15-36-6-23       43-047-37464       357       526         NWH 11-36-6-23       43-047-37462       357       526         NWH 14-32-6-23       43-047-37478       357       526         NWH 2-32-6-23       43-047-37490       357       526         NWH 10-32-6-23       43-047-37400       357       526         NWH 12-32-6-23       43-047-37397       357       526         NWH 16-32-6-23       43-047-37398       357       526         NWH 16-32-6-23       43-047-37398       357       526         OC 2-2-6-19       43-047-37561       153       1,050         G 16-2-6-19       43-047-37562       153       1,050         G 1-2-6-19       43-047-37563       153       1,050				
NH 14-10-6-22       43-047-37394       415       515         NH 4-15-6-22       43-047-37396       415       515         NH 2-15-6-22       43-047-37395       415       515         NWH 13-36-6-23       43-047-37463       357       526         NWH 15-36-6-23       43-047-37464       357       526         NWH 11-36-6-23       43-047-37462       357       526         NWH 14-32-6-23       43-047-37478       357       526         NWH 2-32-6-23       43-047-37399       357       526         NWH 10-32-6-23       43-047-37401       357       526         NWH 10-32-6-23       43-047-37400       357       526         NWH 12-32-6-23       43-047-37397       357       526         NWH 16-32-6-23       43-047-37398       357       526         NWH 16-32-6-23       43-047-37561       153       1,050         G 16-2-6-19       43-047-37562       153       1,050         G 1-2-6-19       43-047-37563       153       1,050	NH 12-7-6-22	43-047-37392	415	<u>515</u>
NH 4-15-6-22       43-047-37396       415       515         NH 2-15-6-22       43-047-37395       415       515         NWH 13-36-6-23       43-047-37463       357       526         NWH 15-36-6-23       43-047-37464       357       526         NWH 11-36-6-23       43-047-37462       357       526         NWH 14-32-6-23       43-047-37478       357       526         NWH 2-32-6-23       43-047-37399       357       526         NWH 8-32-6-23       43-047-37401       357       526         NWH 10-32-6-23       43-047-37400       357       526         NWH 12-32-6-23       43-047-37397       357       526         NWH 16-32-6-23       43-047-37398       357       526         NWH 16-32-6-23       43-047-37561       153       1,050         G 16-2-6-19       43-047-37562       153       1,050         G 1-2-6-19       43-047-37563       153       1,050	NH 16-9-6-22	43-047-37393	415	<u>515</u>
NH 2-15-6-22       43-047-37395       415       515         NWH 13-36-6-23       43-047-37463       357       526         NWH 15-36-6-23       43-047-37464       357       526         NWH 11-36-6-23       43-047-37462       357       526         NWH 14-32-6-23       43-047-37478       357       526         NWH 2-32-6-23       43-047-37399       357       526         NWH 8-32-6-23       43-047-37401       357       526         NWH 10-32-6-23       43-047-37400       357       526         NWH 12-32-6-23       43-047-37397       357       526         NWH 16-32-6-23       43-047-37398       357       526         OG 16-2-6-19       43-047-37561       153       1,050         G 1-2-6-19       43-047-37562       153       1,050         G 1-2-6-19       43-047-37563       153       1,050	NH 14-10-6-22	43-047-37394	415	515
NWH 13-36-6-23       43-047-37463       357       526         NWH 15-36-6-23       43-047-37464       357       526         NWH 11-36-6-23       43-047-37462       357       526         NWH 14-32-6-23       43-047-37478       357       526         NWH 2-32-6-23       43-047-37399       357       526         NWH 8-32-6-23       43-047-37401       357       526         NWH 10-32-6-23       43-047-37400       357       526         NWH 12-32-6-23       43-047-37397       357       526         NWH 16-32-6-23       43-047-37398       357       526         OG 16-2-6-19       43-047-37561       153       1,050         G 16-2-6-19       43-047-37562       153       1,050         G 1-2-6-19       43-047-37563       153       1,050	NH 4-15-6-22	43-047-37396	415	<u>515</u>
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NWH 16-32-6-23       43-047-37398       357       526         G 2-2-6-19       43-047-37561       153       1,050         G 16-2-6-19       43-047-37562       153       1,050         G 1-2-6-19       43-047-37563       153       1,050         1,050       1,050       1,050       1,050	NWH 10-32-6-23	43-047-37400	357	526
G 2-2-6-19     43-047-37561     153     1,050       G 16-2-6-19     43-047-37562     153     1,050       G 1-2-6-19     43-047-37563     153     1,050	NWH 12-32-6-23	43-047-37397	357	526
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G 3-2-0-19 43-04/-3/568 153 1,050	G 3-2-6-19	43-047-37568	153	1,050

#### Clinton Dworshak - cement sks changes

From:

eric bowedn <starman686@yahoo.com>

To:

<cli>dutah.gov>

Date:

1/18/2006 1:39 PM Subject: cement sks changes

here are the cement sks changes that you reqested.

Yahoo! Photos – Showcase holiday pictures in hardcover <a href="Photo Books">Photo Books</a>. You design it and we'll bind it!

#### Ten Point Plan

#### The Houston Exploration Company

#### North Horseshoe 13-2-6-21

Surface Location SW 1/4 SW 1/4, Section 2, T. 6S., R. 21E.

#### 1. Surface Formation

Green River

#### 2. Estimated Formation Tops and Datum:

Formation	Depth	Datum
GR	Surface	5,132'
KB	+12'	5,144'
Green River	3,601'	+1,531'
Wasatch	6,701'	-1,569'
Mesaverda	9,300'	-4,168'
TD	9,400'	-4,268'

A 11" hole will be drilled to 2,000' +/-. The hole depth will depend on the depth that the Birds Nest Zone is encountered. The hole will be drilled 400' beyond the top of the Birds Nest.

#### 3. Producing Formation Depth:

Formation objective includes the Green River, Wasatch, Mesaverde and its submembers.

Off set well information Permitted/Drilled:

North Horseshoe 15-2-6-21

#### 4. Proposed Casing:

Hole	Casing			Coupling	Casing	
<u>Size</u>	<u>Size</u>	Weight/FT	<u>Grade</u>	& Tread	Depth	New/Used
11	8 5/8	36#	J-55	STC	2000	NEW
7 7/8	4 1/2	11.6#	N-80	LTC	T.D.	NEW

#### **Cement Program:**

### The Surface Casing will be cemented to the Surface as follows:

I ead:	Casing <u>Size</u>	Cement Type	Cement Amounts	Cement <u>Yield</u>	Cement Weight
Lead:	8 5/8	Premium Lite II .05#/sk Static Free .25#/sk Cello Flake 5#/sk KOL Seal .002 gps FP-6L 10% Bentonite .5% Sodium Metasili 3% Potassium Chlori	icate	3.38ft³/sk	11.0 ppg
Tail:					
	8 5/8	Class "G" 2% Calcium Chlorid .25#/sk Cello Flake	329 sks. +/- e	1.2ft³/sk	15.6 ppg
Top Jo	b:				
	8 5/8	4% Calcium Chloride .25#/sk Cello Flake	e 200 sks. +/	′-1.10ft³/sk	15.6 ppg

#### Production casing will be cemented to 2,500' or higher as follows:

	Casing	Cement	Cement	Cement	Cement
	Size	<u>Type</u>	Amounts	<u>Yield</u>	<u>Weight</u>
Lead:					
	4 1/2	Premium Lite II .25#/sk Cello Flake .05#/sk Static Free 5#/sk Kol Seal 3% Potassium Chlor .055 gps FP-6L 10% Bentonite .5 Sodium Metasilica	ide	3.3ft³/sk	11.0 ppg
T-:1.					

Tail:

4 1/2	Class "G" .05% Static Free	400 sks +/-	1.56ft <sup>3</sup> /sk	14.3 ppg
	.0370 Static Fiee			
	2 Sodium Chloride			
	.1% R-3			
	2% Bentonite			

#### 5. BOP and Pressure Containment Data:

The anticipated bottom hole pressure will be less than 5000 psi.

A 5000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 8 5/8" surface casing. The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

#### 6. Mud Program:

Interval	Mud weight <u>lbs./gal.</u>	Viscosity Sec./OT.	Fluid Loss Ml/30 Mins.	Mud Type
0-2000 2000-T.D.	Air/Clear Water 8.4-12.0	30	No Control 8-10	Water/Gel Water/Gel

#### 7. Auxiliary Equipment

Upper Kelly cock, full opening stabbing valve, 2 ½" choke manifold and pit level indicator.

#### 8. Testing, Coring, Sampling and Logging:

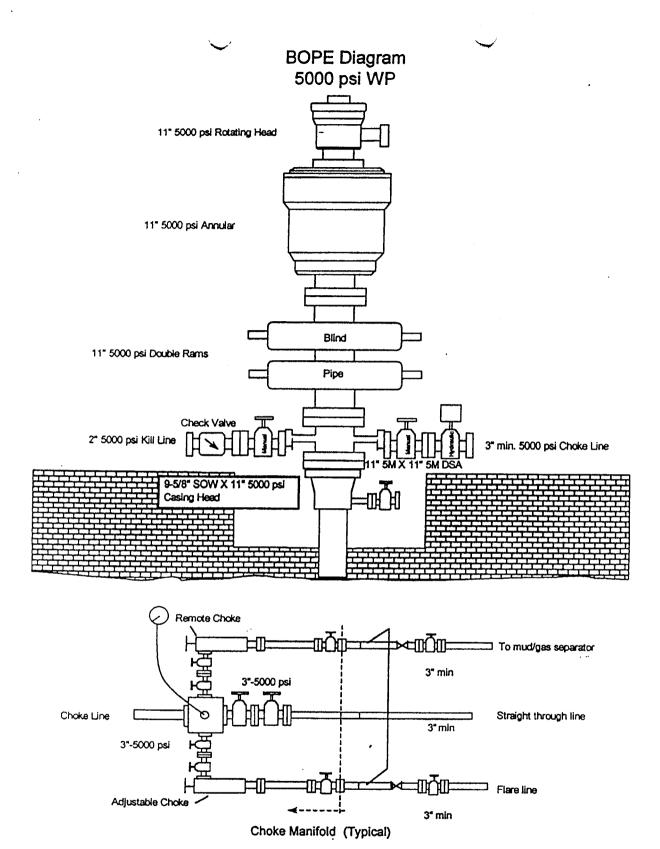
a)	Test:	None are anticipated.	
b)	Coring:	There is the possibility of si	dewall coring.
c)	Sampling:	Every 10' from 2000' to T.I	<b>).</b>
d)	Logging:	Type DLL/SFL W/GR and SP FDC/CNL W/GR and CAL	Interval T.D. to Surf. Csg T.D. to Surf. Csg

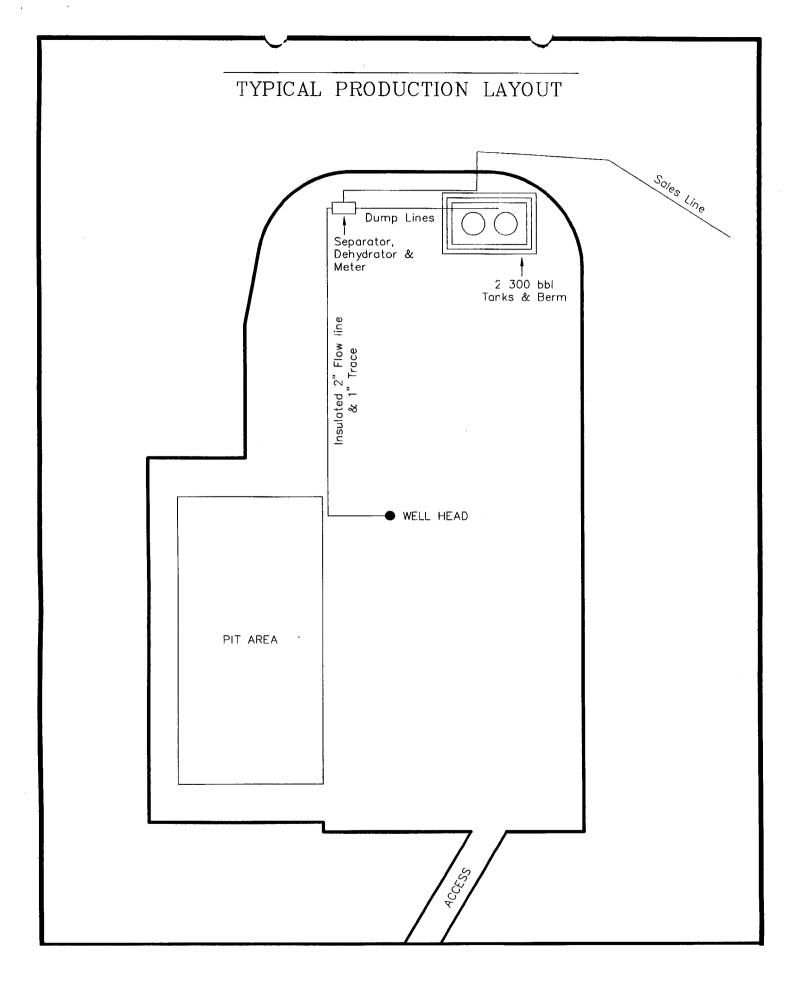
#### 9. Abnormalities (including sour gas):

No abnormal pressures, temperatures or other hazards are anticipated. Oil and gas shows are anticipated in the Wasatch Formation. Other wells drilled in the area have not encountered over pressured zones or H2S.

#### 10. Drilling Schedule:

The anticipated starting date is <u>01/15/2006</u>. Duration of operations is expected to be 30 days.





# THE HOUSTON EXPLORATION COMPANY 13 POINT SURFACE USE PLAN FOR WELL

NORTH HORSESHOE 13-2-6-21

LOCATED IN SW ¼ SW ¼

SECTION 2, T.6S, R21E, S.L.B.&M.

UINTAH COUNTY, UTAH

**LEASE NUMBER: ML-47549** 

**SURFACE OWNERSHIP: STATE** 

#### 1. Existing Roads:

To reach The Houston Exploration Co. well North Horseshoe 13-2-6-21 in Section 2, T6S, R 21E, starting in Vernal, Utah:

Proceed in a westerly direction form Vernal, Utah along US Highway 40 approximately 6.3 miles to the junction of this road and an existing road to the south; exist left and proceed in a southerly, then southeasterly direction approximately 4.6 miles to the beginning of the proposed access for the well 15-2-6-21 to the east; follow road flags in an easterly then, southeasterly direction approximately 2.7 miles to the beginning of the proposed access to the south; follow road flags in a southerly direction approximately 0.2 miles to the proposed location

## Total distance from Vernal, Utah to the proposed well location is approximately 13.8 miles.

All existing roads to the proposed location are State of Utah, BLM maintained or County Class D roads. Please see the attached map for additional details.

#### 2. Planned access road

The proposed access road will be approximately 1,056' +/- of new construction on lease. The road will be graded once per year minimum and maintained.

A) Approximate length	1056 ft
B) Right of Way width	30 ft
C) Running surface	18 ft
D) Surface material	Native soil
E) Maximum grade	5%
F) Fence crossing	None
G) Culvert	None
H) Turnouts	None
I) Major cuts and fills	None
J) Road Flagged	Yes
K) Access road surface	ownership
	State
L) All new construction	on lease
	Yes

Please see the attached location plat for additional details.

None

M) Pipe line crossing

## An off lease right-of-way will not be required.

All surface disturbances for the road and location will be within the lease boundary.

3. Location of existing wells

The following wells are located within
a one-mile radius of the location site.

A) Producing well	None
B) Water well	None
C) Abandoned well	None
D) Temp. abandoned well	None
E) Disposal well	None
F) Drilling /Permitted well	
North Horseshoe 15-2-6-2	1
G) Shut in wells	None
H) Injection well	None
I) Monitoring or observation	well
	None

Please see the attached map for additional details.

4. Location of tank batteries, production facilities and production gathering service lines.

All production facilities are to be contained within the proposed location site. Please see the attached plat plan for a typical gas well separator installation and well site piping.

All permanent (on site for more than six months or longer) structures constructed or installed will be painted an **Carlsbad Canyon** color. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is **Carlsbad Canyon**.

All tanks will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank in the battery. The integrity of the dike will be maintained.

All off lease storage, off lease measurement, commingling on lease or off lease, of production, will have prior written approval form the authorized officer.

If the well is capable of economic production a surface gas line will be required.

Approximately 1,060° +/- of 3" steel surface gas gathering line would be constructed on State. The line will tie into the proposed pipeline in Section 2, T6S, R21E. The pipeline would be strung and boomed to the north of the location and follow access roads. The pipeline may be buried as

determined by the Authorized Officer at the onsite.

An off lease right-of-way will not be required.

Please see the attached location diagrams for pipeline location.

The gas meter run will be located within 500' of the wellhead. The gas line will be buried or anchored down from the wellhead to the meter. Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the tank strapped in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The authorized officer will be provided with a date and time for the initial meter calibration and all future meterproving schedules. A copy of the meter calibration report will be submitted to the State of Utah, Division of Oil, Gas, and Mining. All measurement facilities will conform to API (American Petroleum Institute) and AGA (American Gas Association) standards for gas and liquid hydrocarbon measurement.

5. Location and type of water supply

Water for drilling and cementing will come from The Green River in Permit #T-76073.

#### 6. Source of construction materials

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravel or pit lining material will be obtained from private resources.

#### 7. Methods for handling waste disposal

#### A) Pit construction and liners:

The reserve pit will be approximately 12 ft. deep and most of the depth shall be below the surface of the existing ground Please see the attached plat for details.

The reserve pit will be lined.

The reserve pit will be used to store water for drilling. A semi-closed system will be used to drill the well. All fresh water for drilling will come from a frac tank placed on location and from the rig tank. The pit will be used to hold non-flammable materials such as cuttings, salt, drilling fluids, chemicals, produced fluids, etc.

#### B) Produced fluids:

Produced water will be confined to the reserve pit, or if deemed necessary, a storage tank for a period not to exceed 90 days after initial production. During the 90-day period an application for approval for permanent disposal method and location will

be submitted to the authorized officer. Evaporation may be used instead of trucking to facilitate closing and reclamation of the reserve pit. A pumping system would be used for evaporation.

#### C) Garbage:

A trash cage fabricated from expanded metal will be used to hold trash on location and will be removed to an authorized landfill location.

#### D) Sewage:

A portable chemical toilet will be supplied for human waste.

#### E) Site clean-up:

After the rig is moved off the location the well site area will be cleaned and all refuse removed.

#### 8. Ancillary facilities

There are no ancillary facilities planned at this time and none are foreseen for the future.

#### Well-site layout

Location dimensions are as follows:

A) Pad length	345 ft.
B) Pad width	245 ft.
C) Pit depth	12 ft.
D) Pit length	150 ft.
E) Pit width	75 ft.
F) Max cut	17.0 ft.
G) Max fill	9.2 ft.

H) Total cut yds.

9,810 cu yds

- I) Pit location
- East end
- J) Top soil location
- South end
- K) Access road location

North end corner C

L) Flare Pit

Please see the attached location diagram for additional details.

All pits will be fenced according to the following minimum standards:

- A) Thirty nine inch net wire shall be used with at least one strand of wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- B) The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches above the net wire. Total height of the fence shall be at leas 42 inches.
- C) Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- D) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 ft.
- E) All wire shall be stretched by using a stretching device before it is attached to the corner posts.

10. Plans for restoration of the surface

Prior to construction of the location. the top 6 inches of soil material will be stripped off the location and the pit area. The topsoil removed and piled will amount to approximately 1,710 cubic yards of material. Topsoil will be stockpiled in one distinct pile. Placement of the topsoil is noted on the attached location plat. The topsoil pile from the location will be seeded as soon as the soil is stock piled with the seed mix listed. When all drilling and completion activities have been completed and the pit back-filled the topsoil from the pit area will be spread on the pit area. The pit area will be seeded when the soil has been spread. The unused portion of the location (the area outside the dead men) will be re-contoured.

The dirt contractor will be provided with an approved copy of the surface use plan prior to construction activities.

Changes to the drainage during the construction activities shall be restored to its original line of flow or as near as possible when the pit is back-filled

All disturbed areas will be recontoured to the approximate natural contours. Prior to back filling the pit the fences around the reserve pit will be removed.

The reserve pit will be reclaimed within 90 days of well completion. If the reserve pit has not dried sufficiently to allow back filling, an extension on the time requirement

for back filling the pit will be requested. Once reclamation activities have begun, they shall be completed within 30 days.

After the reserve pit has been reclaimed, no depressions in the soil covering the reserve pit will be allowed. The objective is to keep seasonal rainfall and run off from seeping into the soil used to cover the reserve pit. Diversion ditches and water bars will be used to divert the run off as needed.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas will be scarified and left with a rough surface.

#### A) Seeding dates:

Seed will be spread when topsoil is stock piled and when reclamation work is performed.

The seed mix and quantity list will be used whether the seed is broadcast or drilled.

#### B) Seed Mix

To be determined by the Authorized Officer.

#### 11. Surface ownership:

Access road	State
Location	State
Pipe line	State

#### 12. Other information:

#### A) Vegetation

The vegetation coverage is Slight. The majority of the existing vegetation consists of non-native species. Rabbit brush, bitter brush, and Indian Rice grass and Sagebrush are also found on the location.

#### B) Dwellings:

There are no dwelling or other facilities within a one-mile radius of the location.

#### C) Archeology:

The location has been surveyed. A copy of that survey will be forwarded to your office.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the antiquities act of June 8, 1906) are discovered, all operations, which would affect such sites, will be suspended and the discovery reported promptly to the surface management agency.

#### D) Water:

The nearest water is the Green River located approximately 2 miles to the South.

#### E) Chemicals:

No pesticides, herbicides or other possible hazardous

chemicals will be used without prior application.

#### F) Notification:

- a) Location Construction
   At least forty eight (48)
   hours prior to
   construction of location
   and access roads.
- b) Location completion Prior to moving on the drilling rig.
- c) Spud notice At least twenty-four (24) hours prior to spudding the well.
- d) Casing string and cementing
  At least twenty-four (24) hours prior to running casing and cementing all casing strings.
- e) BOP and related equipment tests At least twenty-four (24) hours prior to initial pressure tests.
- f) First production notice Within five (5) business days after the new well begins, or production resumes after well has been off production for more than 90 days.

#### G) Flare pit:

The flare pit will be located in **corner C** of the reserve pit out side the pit fences and 100 feet from the bore hole on the east side of the location. All fluids will be removed from the pit within 48 hours of occurrence.

## 13. Lessees or Operator's representative and certification

#### A) Representative

William A. Ryan Rocky Mountain Consulting 290 S 800 E Vernal, UT 84078

Office 435-789-0968 Fax 435-789-0970 Cellular 435-828-0968

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, onshore oil and gas orders, and any applicable notices to lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

This drilling permit will be valid for a period of one year from the date of approval.

After permit termination, a new application will be filed for approval for any future operations.

#### B) Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route that I am familiar with the conditions which presently exist, that the statements made in this plan are, to the best

of my knowledge and belief, true and correct, and that the work associated with the operation proposed herein will be preformed by The Houston **Exploration Company and its** contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

Date 11-16

William A. Ryan, Agent Rocky Mountain Consulting

**Onsite Dates:** 

#### Statement of use of Hazardous Materials

No chemical(s) from the EPA's consolidated list of Chemicals subject to Reporting under Title III of the Superfund Amendments and Reauthorization, Act (SARA) of 1986 will be used, produced, transported, stored, disposed, or associated with the proposed action. No extremely hazardous substances, as defined in 40 cfr 355, will be used, produced, stored, transported, disposed, or associated with the proposed action.

If you require additional information please contact:

William A Ryan Agent for The Houston Exploration Company Rocky Mountain Consulting 290 S 800 E Vernal, UT 84078

435-789-0968 Office 435-828-0968 Cell 435-789-0970 Fax

## THE HOUSTON EXPLORATION COMPANY

NORTH HORSESHOE #13-2-6-21

LOCATED IN UINTAH COUNTY, UTAH SECTION 2, T6S, R21E, S.L.B.&M.

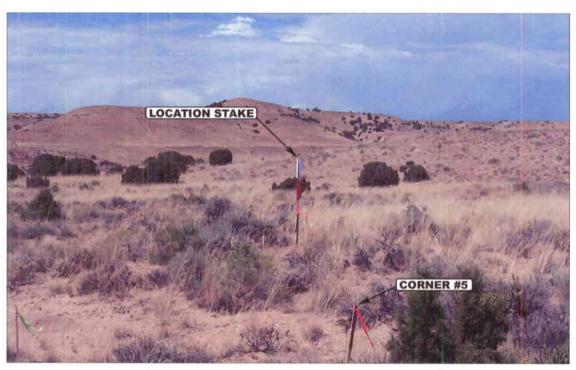
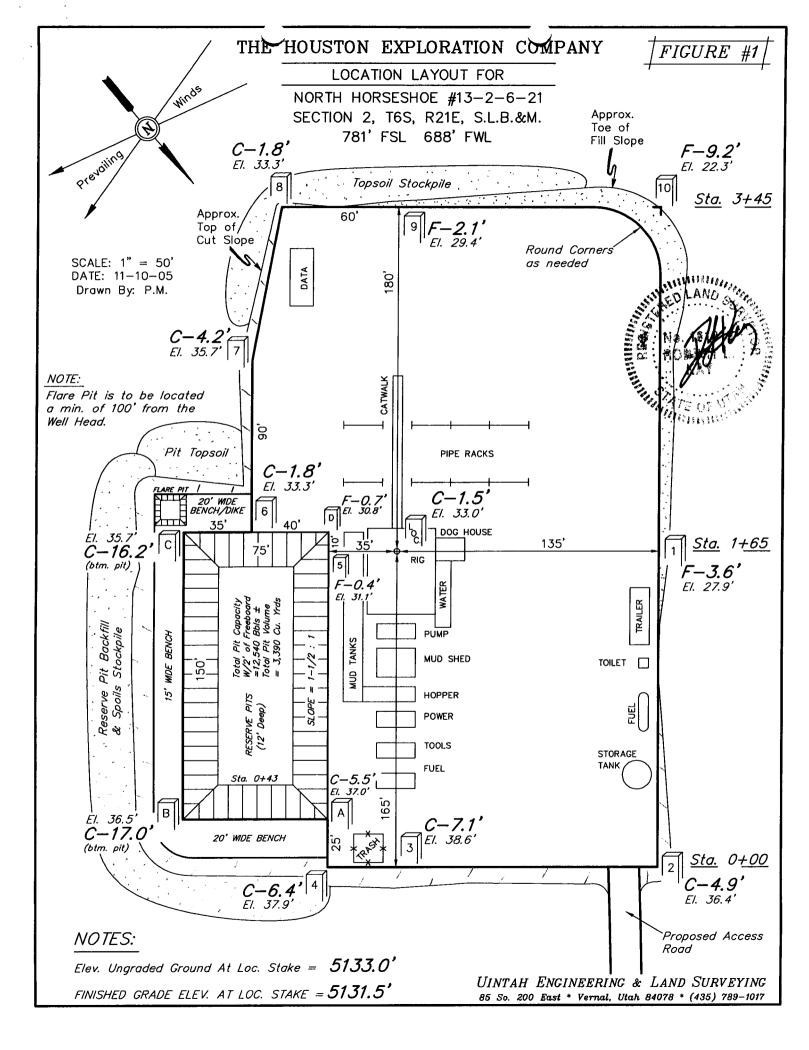


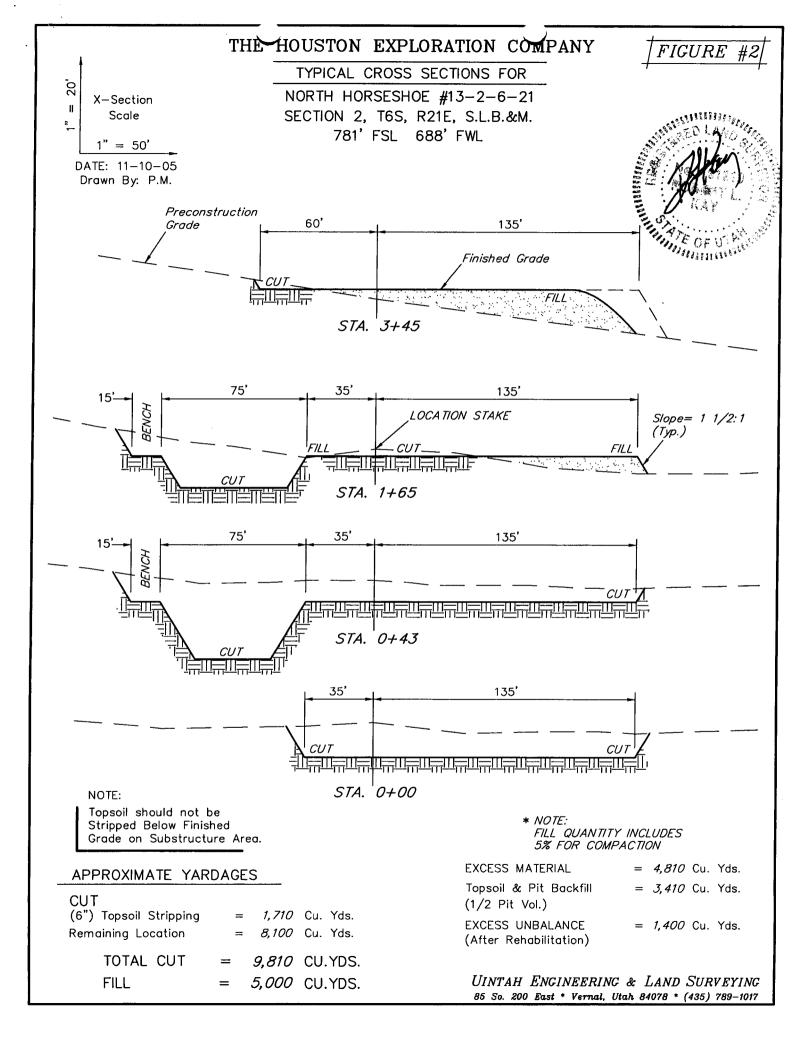
PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

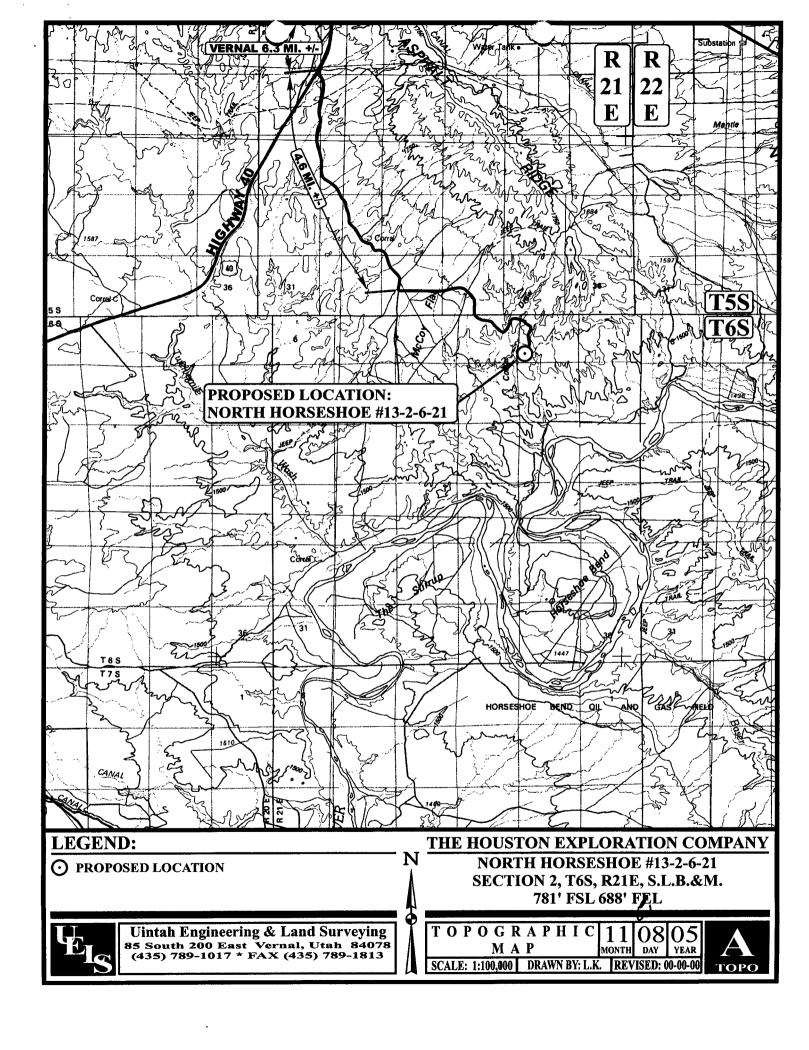
**CAMERA ANGLE: NORTHWESTERLY** 

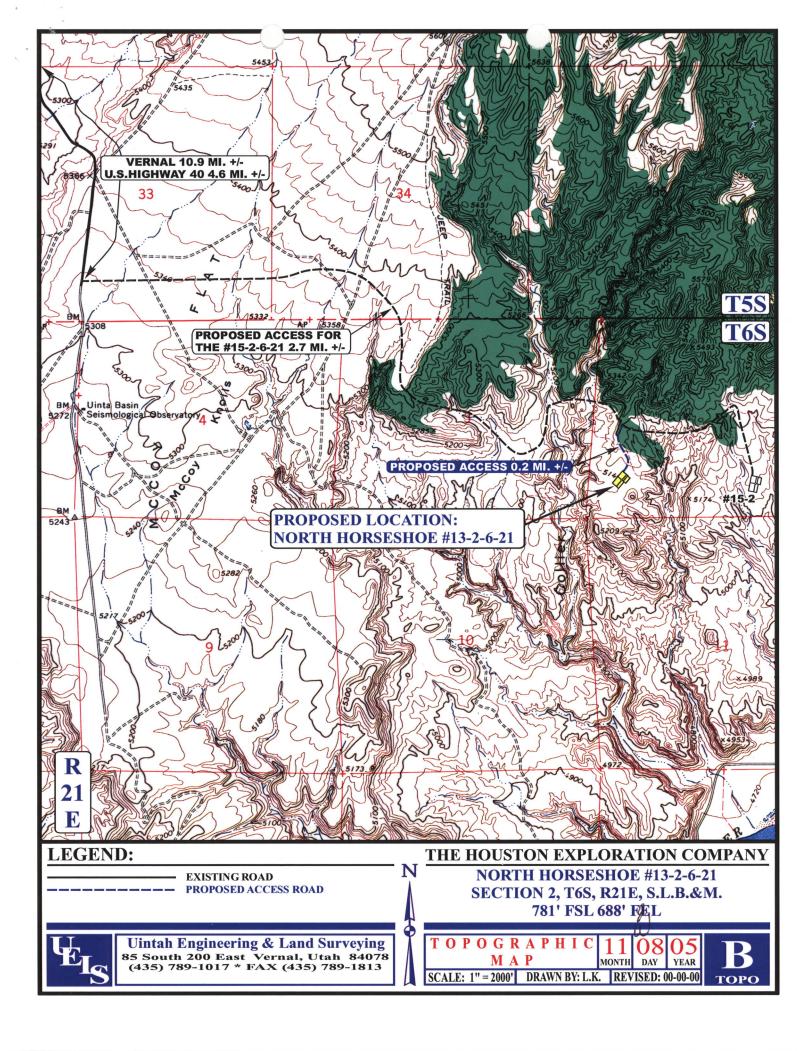


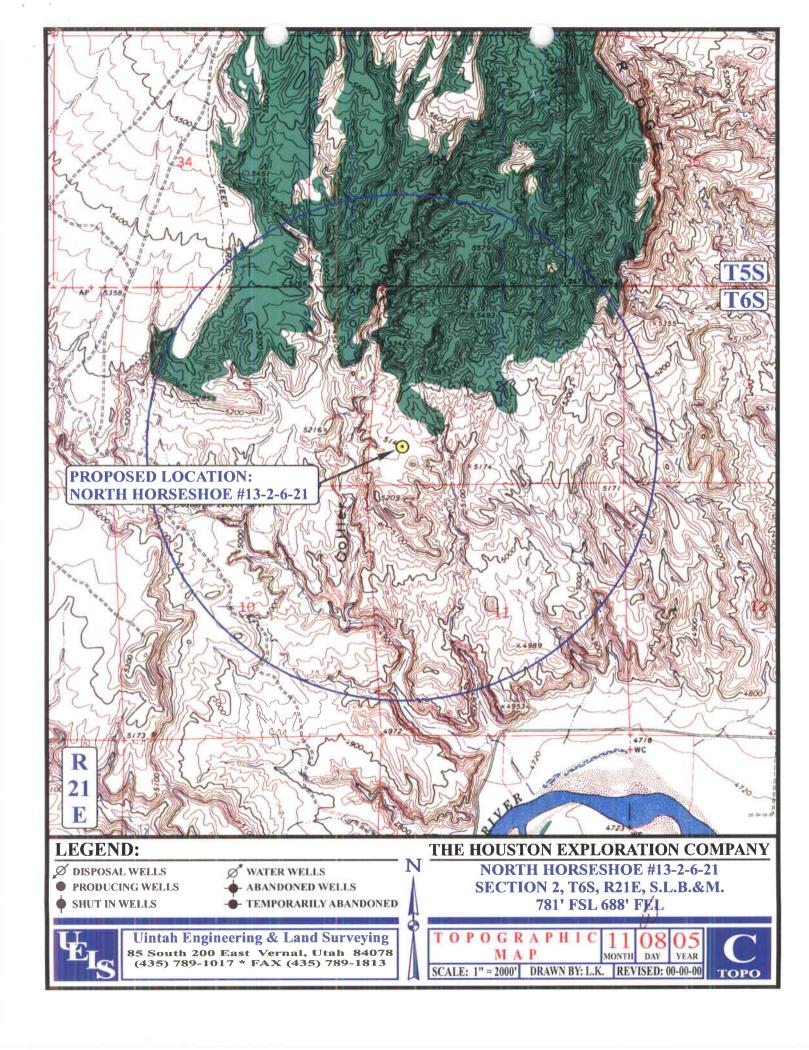


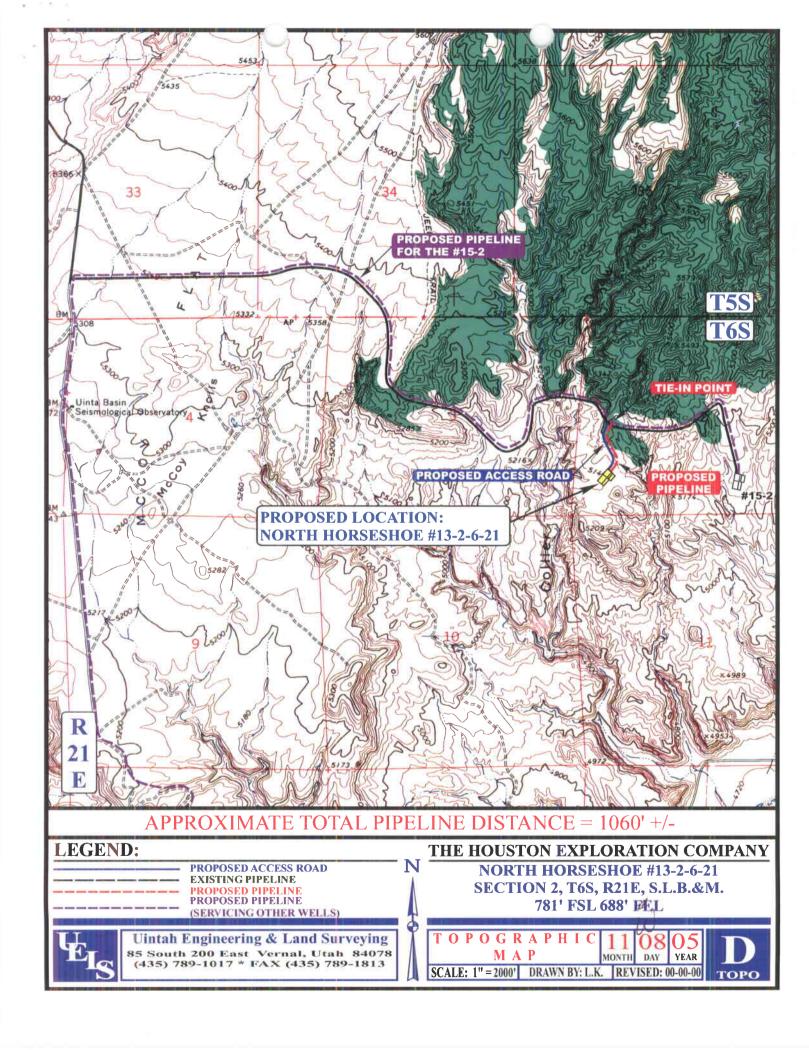






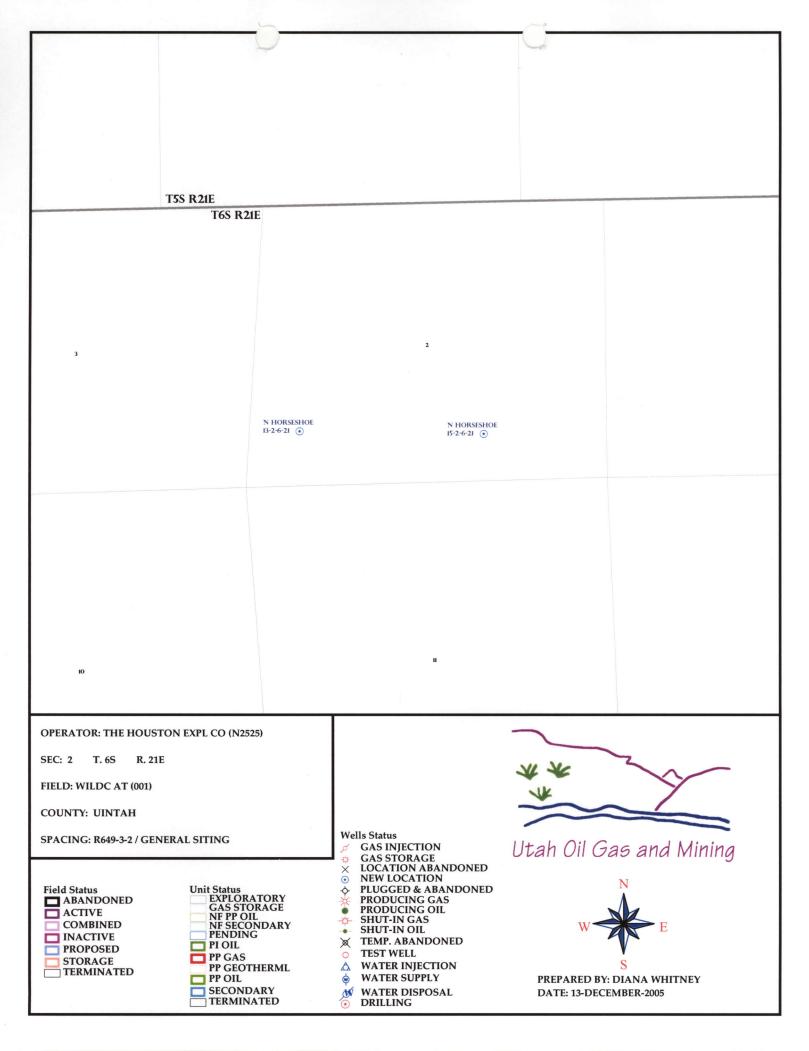






## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/09/2005	API NO. ASSIGNED: 43-047-37476							
<pre>VELL NAME: N HORSESHOE 13-2-6-21 OPERATOR: HOUSTON EXPLORATION CO, ( N2525 ) CONTACT: BILL RYAN</pre>	PHONE NUMBER: 4	35-789-0968						
PROPOSED LOCATION:								
SWSW 02 060S 210E SURFACE: 0781 FSL 0688 FWL	INSPECT LOCATN BY: / /							
BOTTOM: 0781 FSL 0688 FWL	Tech Review	Initials	Date					
UINTAH	Engineering	dus	1/24/06					
WILDCAT ( 1 )	Geology		:					
LEASE TYPE: 3 - State LEASE NUMBER: ML-47549	Surface							
SURFACE OWNER: 3 - State PROPOSED FORMATION: MVRD COALBED METHANE WELL? NO	LATITUDE: 40.32292 LONGITUDE: -109.5302							
Plat    Plat     No. 104155044     Potash (Y/N)     Oil Shale 190-5 (B) or 190-3 or 190-13     Water Permit (No. T-76073     No. T-76073     Characteristic (Date: 12/28/2005     NA Fee Surf Agreement (Y/N)     NA Intent to Commingle (Y/N)	LOCATION AND SITING:  R649-2-3.  Unit  R649-3-2. General							
COMMENTS: Lead Drus to (1) Stipulations: 1. Spacing Stip 2- Statement	01-10-06) OF Basis							



#### DIVISION OF OIL, GAS AND MINING APPLICATION FOR PERMIT TO DRILL STATEMENT OF BASIS

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Geology/Ground Water:  The Houston Ex. Co. proposes to set 2000 feet of surface casing cemented to the surface. The base of the moderately saline water is estimated at 5,100 feet. A search of Division of Water Rights records shows 3 water wells within a 10,000 foot radius of the center of Section 2. All wells are over a mile from the proposed location. Depths range from 20 to 200 feet and are listed as domestic use. The surface formation at this location is the Uinta Formation. The Uinta Formation is made up of discontinuous sands interbedded with shales and are not expected to produce prolific aquifers. The proposed surface casing should adequately protect any near surface aquifers.  Reviewer: Brad Hill Date: 01-17-06  Surface:  The predrill investigation of the surface was performed on 1/10/2006. Ben Williams with UDWR and Jim Davis with SITLA were invited to this investigation by email on 12/14/05. Mr. Williams sent notification that the UDWR would be represented by Chris Wood . Both Mr. Wood and Mr. Davis were in attendance. Mr. Bill Ryan a Consultant for Houston Exploration represented the operator.  Mr. Wood representing the UDWR stated the area is classified as high value yearlong habitat for antelope and limited value yearlong habitat for deer. He did not recommend any restriction periods or actions to the Operator or SITLA for these species. He stated no other wildlife species are expected to be significantly affected. Mr. Wood also gave Mr. Ryan and Mr. Davis, a UDWR recommended seed mix to be used when the reserve pit and location are reclaimed.  The access road to this location is lengthy (2.6 miles) and will require significant cuts and fills for a portion of the road. This road will also access the planned North Horseshoe #15-2-6-21 and potentially other wells in the area.  This site is on State surface, with State minerals, and appears to be the best site for a location in the immediate area.	WELL NAME & NUMBER:	NORTH HORSESHOE 13-2-6-21							
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Conditions of Annuoval/Annlication for Downit to Dutte									
Conditions of Adoroval/Addication for Permit to Drift:	Conditions of Approval/Application	on for Permit to Drill:							

1. Submit plat showing the planned pipeline location.

2. Complete and submit Archeology survey.

## Division of Oil, Gas and Mining

**OPERATOR:** THE HOUSTON EXPLORATION COMPANY

WELL NAME & NUMBER: NORTH HORSESHOE 13-2-6-21

**API NUMBER:** 43-047-37476

**LEASE:** ML-47549 **FIELD/UNIT:** Undesignated

LOCATION: 1/4,1/4 SW/SW SEC: 2 TWP: 6S RNG: 21E, 781 FSL 688 FWL

LEGAL WELL SITING: 460 F SEC. LINE; 460 F 1/4,1/4 LINE; 920 F ANOTHER WELL.

GPS COORD (UTM): 624875 E 4464425 N SURFACE OWNER: STATE OF UTAH (SITLA)

#### **PARTICIPANTS**

Floyd Bartlett (DOGM), Bill Ryan (Consultant for Houston Exploration), Chris Wood (UDWR) Gary Gerber (Stubbs & Stubbs Construction),

#### REGIONAL/LOCAL SETTING & TOPOGRAPHY

Section 2 is within an isolated area surrounded on the 3 sides by BLM lands with SITLA lands located to the north. The section is approximately 10 air miles south of Vernal and 1½ mile north of the Green River from the south section line. The Green River area is known as Horseshoe Bend. McCoy Flat and McCoy Knolls lie to the west of the section. McCoy Flat is a large gentle flat while McCoy knolls contain some deep ravines surrounded by benches or knolls. All drainages in the area are dry becoming ephemeral during spring runoff and intense summer storms. An occasional flat knoll separated by steep sided draws characterizes Section 2. Finding potential well locations without infringing on the adjacent ¼/¼ sections is difficult.

The proposed North Horseshoe 13-2-6-21 well lies on a relative flat bench or knoll, which slopes to the south. Topography is undulating or broken with some very small draws intersecting the location. To the west is a deep steep sided wash or draw. To the north are the steep south slopes of Asphalt Ridge. All drainages in the area are toward the Green River. The only perennial water in the area is in the Green River.

Access to the site from Highway 40 will be following the McCoy Flat Uinta Basin Seismological Observation Station (abandoned) paved road 4.6 miles then approximately 2.4 miles along a proposed access to be constructed to the 15-2-6-21 well then south .2 miles on a proposed road. The last 2 miles of the proposed road will require partial dugway construction along and across steep side slopes and across 2 or more major draws.

#### SURFACE USE PLAN

CURRENT SURFACE USE: Limited hunting and 4-wheeling.

PROPOSED SURFACE DISTURBANCE: Construct 2.6 miles of low standard road, road requiring significant cuts and side-casting and construction of a well location 345'x 210' plus reserve pit and soil stockpile storage outside the described area.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIoS: No existing wells but 2 are planned by this operator.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production facilities will be on location and added after drilling the well. Pipeline as shown on Topo 'D' probably will be changed to go overland southwest to intercept wells in other sections then drop down to the road immediately north of the Green River. Houston Exploration will submit a Sundry Notice when the location has been determined and surveyed.

SOURCE OF CONSTRUCTION MATERIAL: <u>All construction material will be</u> borrowed from site during construction of location.

ANCILLARY FACILITIES: None will be required.

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? EXPLAIN: Unlikely. Oilfield activity is common in general and the location is quite isolated from the general public.

#### WASTE MANAGEMENT PLAN:

Drilled cuttings will be settled into reserve pit. Liquids from pit will be allowed to evaporate. Formation water will be confined to storage tanks. Commercial contractor will handle sewage facilities, storage and disposal. Trash will be contained in trash baskets and hauled to an approved land fill.

#### ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: None. The Green River floodplain is approximately 1 1/2 miles to the south.

FLORA/FAUNA: Proposed location is well vegetation with a desert type vegetation, which includes needle and thread grass, shadscale, rabbit brush, broom snakeweed, black sage and a few juniper.

<u>Dominant fauna is pronghorn, rodents, songbirds, raptors, deer, bobcat, coyote, and small mammals.</u>

SOIL TYPE AND CHARACTERISTICS: Deep sandy loam with no sandstone outcrops.

EROSION/SEDIMENTATION/STABILITY: No stability problems are anticipated with the construction and operation of the location. Access to the location is lengthy but if properly constructed and maintained, no stability or erosion issues should occur.

PALEONTOLOGICAL POTENTIAL: none observed.

#### RESERVE PIT

CHARACTERISTICS: 150' by 75' and 12' deep. The reserve pit is planned in an area of cut on the north east side of the location. No stabilization problems are expected.

LINER REQUIREMENTS—(Site Ranking Form attached)—Stability Level III. A liner is not required but the operator routinely installs a 16 mil liner to conserve water. Bill Ryan stated this would be the case on this well.

#### SURFACE RESTORATION/RECLAMATION PLAN

<u>AS</u>	PER SITLA.				 	·	 		 
SURFACE	AGREEMENT:	AS	PER	SITLA.	 		 	 	

CULTURAL RESOURCES/ARCHAEOLOGY: Not yet surveyed

#### OTHER OBSERVATIONS/COMMENTS

Chris Wood representing the UDWR stated the area is classified as high value yearlong habitat for antelope and limited value yearlong habitat for deer. He did not recommend any restrictions to the Operator or SITLA.

The access road to this location is lengthy and will require significant cuts and fills for a portion of the road.

#### ATTACHMENTS

Photos of site have been taken and placed on file.

Floyd Bartlett
DOGM REPRESENTATIVE

1/10/2005 10:20 PM DATE/TIME

#### Luation Ranking Criteria and Ranking —re For Reserve and Onsite Pit Liner Requirements

Site-Specific Factors	Ranking	Site Ranking
-		
Distance to Groundwater (feet) >200	0	
100 to 200	5	
75 to 100	10	0
25 to 75 <25 or recharge area	15 20	<u>0</u>
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10 15	
100 to 200 < 100	20	0
Distance to Nearest Municipal		
Well (feet)		
>5280	0	
1320 to 5280	5 10	
500 to 1320 <500	20	0
		<del></del>
Distance to Other Wells (feet) >1320	0	
300 to 1320	10	
<300	20	0
Native Soil Type		
Low permeability	0	
Mod. permeability	10	10
High permeability	20	<u>10</u>
Fluid Type	0	
Air/mist Fresh Water	0 5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid	15	
containing significant levels of hazardous constituents	20	5
Drill Cuttings Normal Rock	0	
Salt or detrimental	10	0
Paral Parairitation (imphas)		
Annual Precipitation (inches) <10	0	
10 to 20	5	
>20	10	0
Affected Populations		
<10	0	
10 to 30 30 to 50	6 8	
>50	10	0
Presence of Nearby Utility		
Conduits		
Not Present	0	
Unknown Present	10 15	0
Licoont		<u>~_</u>

Final Score 15 (Level III Sensitivity)

Sensitivity Level I = 20 or more; total containment is required. Sensitivity Level II = 15-19; lining is discretionary. Sensitivity Level III = below 15; no specific lining is required.





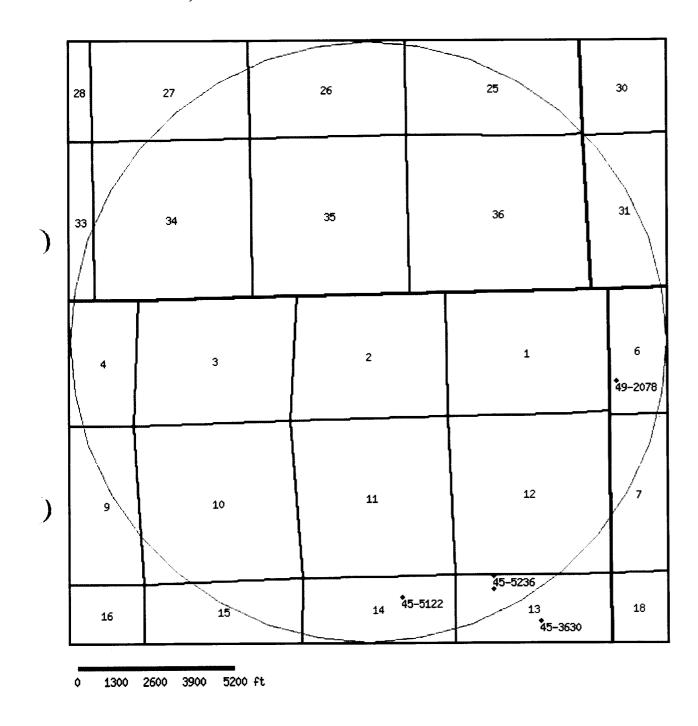


#### **WRPLAT Program Output Listing**

Version: 2004.12.30.00

Rundate: 01/17/2006 10:47 AM

Radius search of 10000 feet from a point N2640 E2640 from the SW corner, section 02, Township 6S, Range 21E, SL b&m Criteria:wrtypes=W,C,E podtypes=U status=U,A,P usetypes=all



### Water Rights

	WR Number	Diversion Type/Location	Well Log	Status	Priority	Uses	CFS	ACFT	Owner Name
	45-3630	Underground		P	19750418	DIS	0.015	0.000	. NED B. MITCHELL CONSTRUCTION INC.
		S1550 W2380 NE 13 6S 21E SL							P.O. BOX 186
	45-4877	Underground		P	19810819	DIS	0.015	0.000	L. J. CUMMINGS
}		S475 E1270 NW 13 6S 21E SL							5164 SOUTH 2000 WEST
	45-5051	Underground		P	19820809	DIS	0.015	0.000	BOYD AND GEORGIA CHAMPION
		S30 E1274 NW 13 6S 21E SL							1933 WEST HORSESHOE BEND
	45-5122	Underground		P	19831227	DIS	0.007	1.562	GARN & EDNA MASSEY
		S715 W1799 NE 14 6S 21E SL							2375 WEST HORSESHOE BEND ROAD
	45-5236	Underground		P	19860317	DIS	0.015	0.000	FLORENCE L. & DONALD E. CULLUM
		S30 E1274 NW 13 6S 21E SL							1901 WEST HORSESHOE BEND
)	49-2078	Underground		P	19510426	DI	0.200	0.000	CHEVRON OIL COMPANY
•		N1150 E230 SW 06 6S 22E SL							P.O. BOX 780

Natural Resources | Contact | Disclaimer | Privacy Policy | Accessibility Policy

#### **STATE ACTIONS**

### Resource Development Coordinating Committee Governor's Office of Planning and Budget 5110 State Office Building SLC, UT 84114

Phone No. 537	<b>-9230</b>
1. State Agency	2. Approximate date project will start:
Oil, Gas and Mining	
1594 West North Temple, Suite 1210	Upon Approval or December 27, 2005
Salt Lake City, UT 84114-5801	
3. Title of proposed action:	
Application for Permit to Drill	
4. Description of Project:	
The Houston Exploration Company proposes to dr	ill the North Horseshoe 13-2-6-21 well
(wildcat) on a State lease ML-47549, Uintah County,	Utah. This action is being presented to the
RDCC for consideration of resource issues affecting s	tate interests. The Division of Oil, Gas and
Mining is the primary administrative agency in this ac	tion and must issue approval before operations
commence.	
5. Location and detailed map of land affected (site loca	ation map required, electronic GIS map
preferred)	
(include UTM coordinates where possible) (indicate co	
781' FSL 688' FWL, SW/4 SW	
Section 2, Township 6 South, Range 21	East, Uintah County, Utah
6. Possible significant impacts likely to occur:	
Surface impacts include up to five acres of surface	e disturbance during the drilling and completion
phase (estimated for five weeks duration). If oil and g	gas in commercial quantities is discovered, the
location will be reclaimed back to a net disturbance of	
road, pipeline, or utility infrastructure. If no oil or gas	s is discovered, the location will be completely
reclaimed.	
7. Identify local government affected	
a. Has the government been contacted? No.	
b. When?	
<ul><li>c. What was the response?</li><li>d. If no response, how is the local government(s) li</li></ul>	koly to he impacted?
• /	
8. For acquisitions of land or interests in land by DW	
representative and state senator for the project area.	
representative, state senator near project site, if appli	
a. Has the representative and senator been contact	ed? N/A
9. Areawide clearinghouse(s) receiving state action: (	(to be sent out by agency in block 1)
Uintah Basin Association of Governments	
10. For further information, contact:	11. Signature and title of authorized officer
1	-1 0
	Still &
Diana Whitney	Gil Hunt, Associate Director
L'IMIM II IIIII	1

December 13, 2005

Date:

(801) 538-5312

Phone:

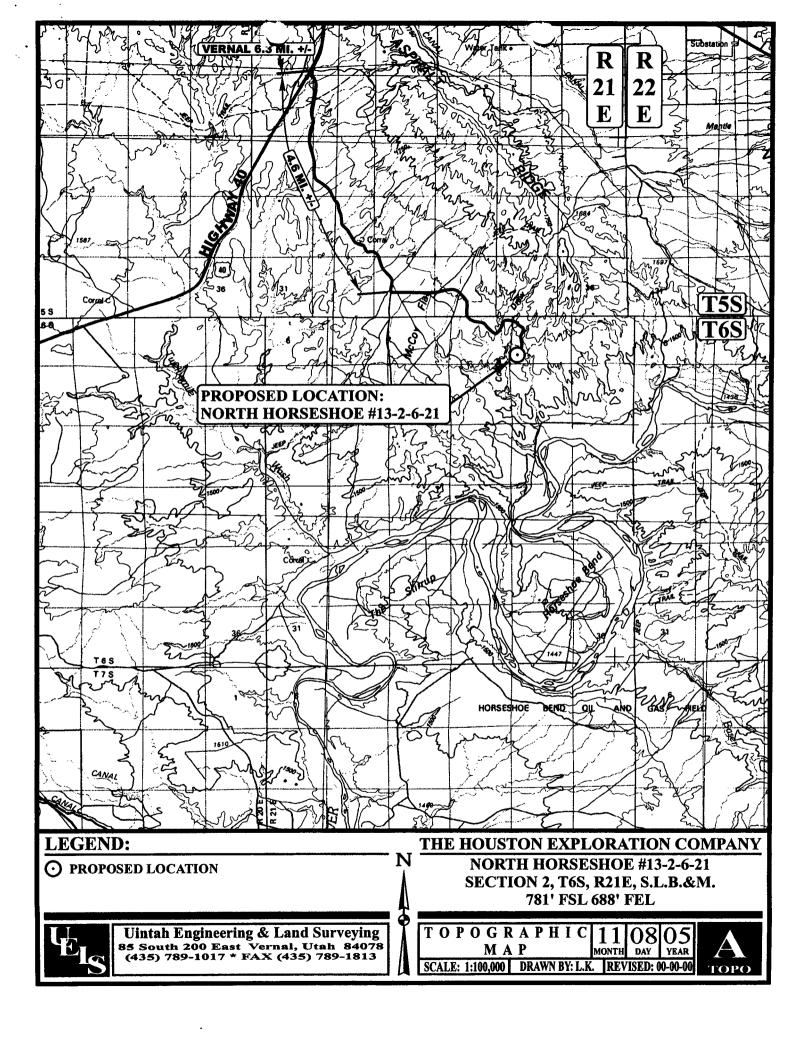
# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

FORIN

AMENDED REPORT

			·-··					ht changes)		
		APPLICAT	ION FOR I	PERMIT TO	DRILL		5. MINERAL LEASE NO: ML-47549	6. SURFACE: State		
1A. TYPE OF WO	RK: DI	RILL 🔽 🛚 F	REENTER	DEEPEN			7. IF INDIAN, ALLOTTEE OF	TRIBE NAME:		
B. TYPE OF WE	.t: OIL	GAS 🗹 C	THER	SIN	GLE ZONE MULTIPLE ZON	NE 🗾	8. UNIT or CA AGREEMENT	NAME:		
	n Explorati	on Company					9. WELL NAME and NUMBE North Horseshoe			
3. ADDRESS OF		2( <sub>CITY</sub> Housto	on	TX ZIP 770	PHONE NUMBER: (713) 830-6800		10. FIELD AND POOL, OR V Undisignated	MLDCAT:		
	WELL (FOOTAGE	(7) : 1	V				11. QTR/QTR, SECTION, TO	WNSHIP, RANGE,		
AT SURFACE:	781' FSL 8	688' FWL	4	4644254	40.322919		MERIDIAN: SWSW 2 T6	S 21E		
AT PROPOSED	PRODUCING ZON	NE: Same as	above.	, , , , ,	101.330141			O 212		
		CTION FROM NEAR	EST TOWN OR POS	ST OFFICE:			12. COUNTY:	13. STATE: UTAH		
	s south of V						Uintah			
15. DISTANCE TO 688'	NEAREST PROP	PERTY OR LEASE LI	NE (FEET)	16. NUMBER OF	F ACRES IN LEASE:	1	MBER OF ACRES ASSIGNE			
	NEAREST WELL	(DRILLING, COMPL	ETED OR	19. PROPOSED	640		ND DESCRIPTION:	40		
	ON THIS LEASE		2120,011	10.111010022	9,400	İ	1155044			
	(SHOW WHETHE	R DF, RT, GR, ETC.	 ):	22. APPROXIMA	ATE DATE WORK WILL START:		TIMATED DURATION:			
5,132' GR				1/15/200	06	30 Days				
24.			PROPOS	ED CASING AI	ND CEMENTING PROGRAM					
SIZE OF HOLE	CASING SIZE,	GRADE, AND WEIG	HT PER FOOT	SETTING DEPTH	CEMENT TYPE, QU	JANTITY, Y	IELD, AND SLURRY WEIGH	T		
11"	9 5/8	J-55	36#	2,000	Premium Lite II	250	SKS 3.38 C	F 11.0 PPG		
					CLASS "G"	329	SKS 1.2 C	F 15.6 PPG		
					Calcium Chloride	200	SKS 1.10 C	F 15.6 PPG		
7 7/8	4 1/2	N-80	11.6#	9,400	Premium Lite II	200	SKS 3.3 C	F 11.0 PPG		
					CLASS "G"	400	SKS 1.56 C	F 14.3 PPG		
25.				ATTA	CHMENTS		CUNICIDE	NITIAI		
VERIFY THE FOL	LOWING ARE AT	TACHED IN ACCORE	DANCE WITH THE U	JTAH OIL AND GAS C	ONSERVATION GENERAL RULES:		POINT INF	<del>                                     </del>		
<b>⊘</b> WELLPL					l 170					
					COMPLETE DRILLING PLAN					
<b>✓</b> EVIDENO	E OF DIVISION O	F WATER RIGHTS A	PPROVAL FOR USI	E OF WATER	FORM 5, IF OPERATOR IS P	ERSON OF	R COMPANY OTHER THAN 1	HE LEASE OWNER		
	Willian	n A Ryan			Agent					
NAME (PLEASE	PRINT) VIIII III		$\rightarrow$		TITLE Agent					
SIGNATURE		om a	Dyon		DATE 12:1:15		CI	TVED		
(This space for Sta	te use only)						RECE	-1 V		
	,	10 00-	· · · · · · · · · · · · · · · · · · ·				DEC	9 2005		
API NUMBER AS	SIGNED:	13-047-3	57476		APPROVAL:		niv. OF OIL	GAS & MINING		

#### THE HOUSTON EXPLORATION COMPANY T6S, R21E, S.L.B.&M. Well location, NORTH HORSESHOE #13-2-6-21, located as shown in the SW 1/4 SW 1/4 (LOT 6) of Section 2, T6S, R21E, S.L.B.&M. Uintah County, Utah. BASIS OF ELEVATION T5S——N89°59' $\stackrel{\mathtt{L}}{\mathtt{L}}$ – 7844.10' (G.L.O.)--N89°40'E - 2659.14' (G.L.O.)-SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 706,20 3, T6S, R21E, S.L.B.&M. TAKEN FROM THE VERNAL SE, (6.1.0)UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC (G.L.O.) 6 MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY, SAID ELEVATION IS LOT 4 LOT 3 LOT 2 LOT 1 MARKED AS BEING 5358 FEET. 1920 Brass Cap 1.2' High. 1920 Brass Cap Pile of Stones 1.5' High, Pile of Stones LOT 5 2638.84 2644.03' NORTH HORSESHOE SCALE #13-2-6-21 Elev. Ungraded Ground = 5133' THIS IS TO CERTIFY THAT THE TROVE PLAT WAS EREPLIED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR PRINTER MY LOT 6 SUPERVISION AND THAT THE SAME ARE BEST OF MY KNOWLEDGE AND S89'09'27"W - 2661.58' (Meas.) S8912'05"W - 2647.25' (Meas.) 1920 Brass Cap 1920 Brass Cap-1920 Brass Cap 1.0° High, Pile 2.0' High, Pile 1.3° High of Stones of Stones BASIS OF BEARINGS UINTAH ENGINEERING & LAND SURVEYING BASIS OF BEARINGS IS A G.P.S. OBSERVATION. 85 SOUTH 200 EAST - VERNAL, UTAH 84078 (435) 789-1017 (AUTONOMOUS NAD 83) LEGEND: SCALE DATE SURVEYED: DATE DRAWN: LATITUDE = $40^{\circ}22.27$ " (40.322853) 1" = 1000'11-04-05 11-10-05 LONGITUDE = $109^{\circ}31^{\circ}51.76^{\circ}$ (109.531044) = 90° SYMBOL PARTY REFERENCES (AUTONOMOUS NAD 27) D.S. P.M. N.H. G.L.O. PLAT = PROPOSED WELL HEAD. LATITUDE = $40^{\circ}9'22.41''$ (40.322892) WEATHER FILE THE HOUSTON LONGITUDE = $109^{\circ}31'49.27''$ (109.530353) = SECTION CORNERS LOCATED. COOL EXPLORATION COMPANY



Project Number: 6027 Sponsor: Division of Oil, Gas and Mining

SLB&M: Sec. 2, T6S, R21E Counties Affected: Uintah

Description: Application for Permit to Drill - proposal to drill a wildcat

#### Comments:

Well must be sited, drilled, and managed to prevent degradation of water quality through measures to limit erosion, limit stormwater runoff, and limit pollutant loading to runoff.

- 1- Wellpad placement or expansion disturbs soils. Vegetative and/or structural measures to control erosion should be implemented within 60 days of initial soil disturbance to prevent erosion leaving the site from exceeding the tolerable rate as determined by the local office of USDA/NRCS.
- 2- If vegetation surrounding the wellpad does not provide at least 60% ground cover within 60 days of creating the wellpad, engineering practices should be implemented within those 60 days to control erosion. Such engineering measures may include mulching, use of fiber mats, cross slope trenching, contour furrows, rock dams, terracing or such other erosion control practices as are required to prevent erosion from exceeding the tolerable rate.
- 3- No disturbance or degradation to or of surrounding or nearby soils, native or beneficial vegetation, or riparian areas should be permitted.
- 4- In addition, no spills nor runoff of chemicals including hydrocarbons, lubricants, salt water, antifreeze, or other potentially damaging materials should be permitted.

THEC

#### **MEMORANDUM**

DATE:

December 20, 2005

TO:

Utah Division of Oil, Gas and Mining

CC:

Resource Development Coordinating Committee

FROM:

Utah Geological Survey Ground Water & Paleontology Program

SUBJECT:

UGS comments on RDCC short turn around items 6018, 6019, 6020,

6021, 6022, 6025, 6027, and 6028.

6018. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 32, T8S, R25E, Uintah County

Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 11-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6019. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 32, T8S, R25E, Uintah County

Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 3-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6020. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 32, T8S, R25E, Uintah County

Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 5-

32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6021. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 1532-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6022. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 932-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6025. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 8, T29S, R24E, San Juan County
Application for Permit to Drill - proposal to drill a wildcat well the NW Bullhorn 8-31 on a Fee lease Fee

Although there are no paleontological localities recorded in our files for this project area, the Early Cretaceous Burro Canyon that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6027. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit
Sec. 2, T6S, R21E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the North Horseshoe 13-2-6-21 on a State lease ML-47549

Although there are no paleontological localities recorded in our files for this project area, the Eocene Duchesne River Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6028. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 2, T6S, R21E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the North Horseshoe 15-2-6-21 on a State lease ML-47549

Although there are no paleontological localities recorded in our files for this project area, the Eocene Duchesne River Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

From:

Robert Clark Whitney, Diana

To: Date:

12/20/2005 4:08:49 PM

Subject:

**RDCC** comments

The following comments on RDCC #6018 - 6028 are being sent directly to DOG&M due to their short turn around times.

RDCC #6018 - 6022, #6027, & #6028, comments begin: The proposed Houston Exploration well drilling projects in Uintah County may require permits, known as Approval Orders, from the Utah Division of Air Quality if any compressor stations are constructed at the sites. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed projects are also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the projects. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm. Comments end.

RDCC #6023, #6025, & #6026, comments begin: The proposed Cabot Oil and Gas well drilling projects in San Juan County may require permits, known as Approval Orders, from the Utah Division of Air Quality if any compressor stations are constructed at the sites. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed projects are also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the projects. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm. Comments end.

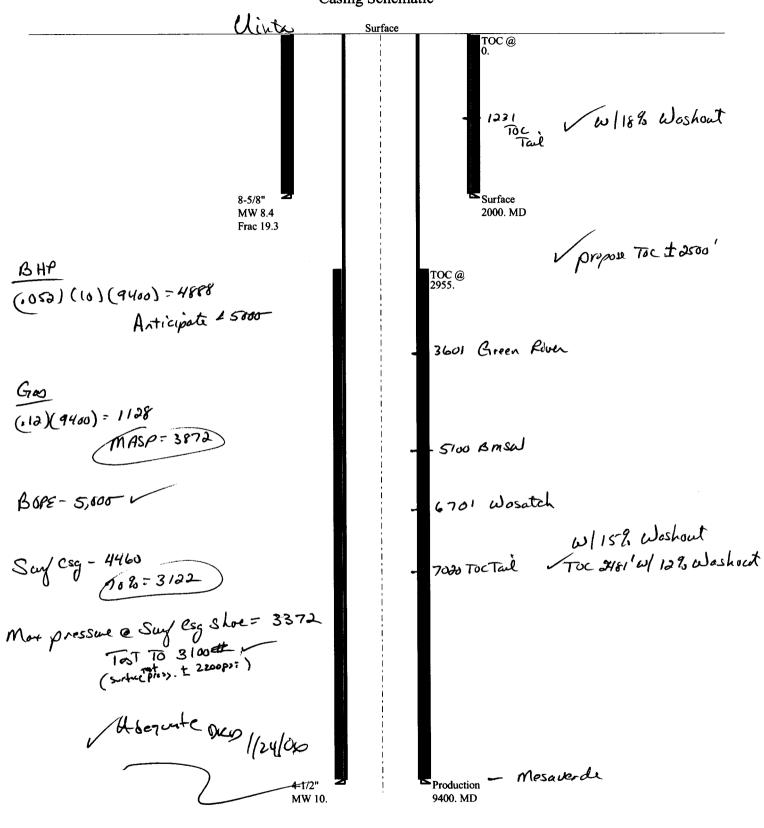
RDCC #6024, comments begin: The proposed Delta Petroleum well drilling project in Grand County may require a permit, known as Approval Order, from the Utah Division of Air Quality if any compressor stations are constructed at the site. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed project is also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm. Comments end.

Robert Clark Utah Division of Air Quality 536-4435

CC: Mcneill, Dave; Wright, Carolyn

### ✓1-06 Houston N Horseshoe 1<del>✓</del>2-6-21

**Casing Schematic** 



01-06 Houston N Horseshoe 13-2-6-21 Well name:

**Houston Exploration Company** Operator:

Project ID: String type: Surface 43-047-37476

**Uintah County** Location:

Minimum design factors: **Environment: Design parameters:** 

H2S considered? No Collapse: **Collapse** 65 °F Mud weight: 8.400 ppg Design factor 1.125 Surface temperature: 93 °F

Bottom hole temperature: Design is based on evacuated pipe. Temperature gradient: 1.40 °F/100ft

> Minimum section length: 250 ft

**Burst:** 0 ft 1.00 Cement top: Design factor

**Burst** Max anticipated surface

> 1,760 psi pressure: 0.120 psi/ft Non-directional string. Internal gradient: Tension:

> 2,000 psi 8 Round STC: 1.80 (J) Calculated BHP

1.80 (J) 8 Round LTC: **Buttress:** 1.60 (J) No backup mud specified. 1.50 (J) Premium:

3.954

1.50 (B) Re subsequent strings: Body yield:

Tension is based on buoyed weight.

Next setting depth: 9,400 ft 10.000 ppg Next mud weight: Next setting BHP: 4,883 psi 1,749 ft Neutral point: Fracture mud wt: 19.250 ppg

2,000 ft Fracture depth: 2,000 psi Injection pressure

63

Run Seq	Segment Length (ft) 2000	<b>Size</b> (in) 8.625	Nominal Weight (Ibs/ft) 36.00	<b>Grade</b> J-55	End Finish ST&C	True Vert Depth (ft) 2000	Measured Depth (ft) 2000	Drift Diameter (in) 7.7	Internal Capacity (ft³) 143.5	
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor	

4460

2.23

2000

Clinton Dworshak Prepared Utah Div. of Oil & Mining by:

3450

Phone: 801-538-5280 FAX: 810-359-3940

Date: January 19,2006 Salt Lake City, Utah

434

6.89 J

Remarks:

1

873

Collapse is based on a vertical depth of 2000 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

01-06 Houston N Horseshoe 13-2-6-21 Well name:

**Houston Exploration Company** Operator:

Production Project ID: String type: 43-047-37476

**Uintah County** Location:

**Design parameters:** 

**Collapse** 

Mud weight: 10.000 ppg

Design is based on evacuated pipe.

Minimum design factors: **Environment:** Collapse:

Design factor 1.125

H2S considered?

No 65 °F Surface temperature: 197 °F Bottom hole temperature: 1.40 °F/100ft

Temperature gradient: Minimum section length: 1,500 ft

**Burst:** 

Design factor 1.00 Cement top:

Non-directional string.

2,955 ft

**Burst** 

Max anticipated surface

3,755 psi pressure: Internal gradient: 0.120 psi/ft Calculated BHP 4,883 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC:

1.60 (J) **Buttress:** 1.50 (J) Premium: 1.50 (B) Body yield:

Tension is based on buoyed weight. Neutral point: 7,995 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	9400	4.5	11.60	N-80	LT&C	9400	9400	3.875	217.9
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	<b>√883</b>	6350	1 300	4883	7780	1.59	93	223	2.40 J

Clinton Dworshak Prepared Utah Div. of Oil & Mining by:

Phone: 801-538-5280 FAX: 810-359-3940

Date: January 19,2006 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9400 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

From:

**Ed Bonner** 

To:

Whitney, Diana

Date:

6/27/2006 10:17:58 AM

Subject:

Well Clerance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

Dominion E&P, Inc LCU 1-2H

Enduring Resources, LLC Rock House 10-23-23-32 Rock House 11-23-11-2

EOG Resources, Inc Big Spring 3-36 GR East Chapita 30-16

The Houston Exploration Company

North Horseshoe 1-16-6-21

North Horseshoe 13-16-6-21

North Horseshoe 13-2-6-21 North Horseshoe 15-2-6-21

Kerr McGee Oil & Gas Onshore LP

NBU 921-25A

**NBU 921-25P** 

NBU 921-35J

NBU 922-32K2

**Questar Exploration & Production** 

HR 2MU-2-12-23

HR 3MU-2-12-23

HR 6MU-2-12-23

(Cleared provided operator follows arch consultants recommendation to move location avoiding significant site)

HR 10MU-2-12-23

HR 12MU-2-12-23

HR 14MU-2-12-23

HR 16MU-2-12-23

Stone Energy Corporation Stone Rush 44-32-8-17

If you have any questions regarding this matter please give me a call.

CC: Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil



State of Utah

### Department of Natural Resources

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

JOHN R BAZA
Division Director

JON M. HUNTSMAN, JR. Governor

GARY R. HERBERT Lieutenant Governor

June 29, 2006

The Houston Exploration Company 1100 Louisiana, Suite 200 Houston, TX 77002

Re: North Horseshoe 13-2-6-21 Well, 781' FSL, 688' FWL, SW SW, Sec. 2,

T. 6 South, R. 21 East, Uintah County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-37476.

Sincerely

Associate Director

mf Enclosures

cc: Uintah County Assessor

**SITLA** 

<b>Operator:</b>	The Houston Exploration Company
Well Name & Number	North Horseshoe 13-2-6-21
API Number:	43-047-37476
Lease:	ML-47549

#### **Conditions of Approval**

T. 6 South

**R.** 21 East

#### 1. General

Location: SW SW

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

#### 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment

Sec. 2

- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

- 5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.
- 6. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

### STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OU. GAS AND MINING

FORM 9

[	DIVISION OF OIL, GAS AND M	INING	Call to me	5. LEASE DESIGNATION AND SERIAL NUMBER: ML-47549
CUNDRY	NOTICES AND REPORT	S ON WEI	15	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
				7. UNIT OF CA AGREEMENT NAME:
Do not use this form for proposals to drill no	ew wells, significantly deepen existing wells below a terals. Use APPLICATION FOR PERMIT TO DRILL	urrent bottom-hole dep , form for such proposa	th, reenter plugged wells, or to als.	NA
1. TYPE OF WELL OIL WELL		· · · · · · · · · · · · · · · · · · ·		8. WELL NAME and NUMBER: North Horseshoe13-2-6-21
				9. API NUMBER:
2. NAME OF OPERATOR: The Houston Exploration (	Company			4304737476
3. ADDRESS OF OPERATOR:		77000	PHONE NUMBER: (713) 830-6800	10. FIELD AND POOL, OR WILDCAT: Undesignated
	Y Houston STATE TX ZI	77002	(713) 830-8800	- Ondoorg. and o
4. LOCATION OF WELL FOOTAGES AT SURFACE: 781' F	SL & 688' FWL			COUNTY: Uintah
	C. CERNI PROPERTY CONTROL CONTROL AND ADDRESS AND ADDR			OTATE.
QTR/QTR, SECTION, TOWNSHIP, RAN	IGE, MERIDIAN: SWSW 2 6S	21E		STATE: UTAH
11. CHECK APPI	ROPRIATE BOXES TO INDICA	TE NATURE	OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION			YPE OF ACTION	
	ACIDIZE	DEEPEN		REPERFORATE CURRENT FORMATION
NOTICE OF INTENT (Submit in Duplicate)	ALTER CASING	FRACTUR	ETREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	☐ NEW CON	STRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATO	R CHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND	ABANDON	VENT OR FLARE
SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BAC	CK .	WATER DISPOSAL
Date of work completion:	CHANGE WELL STATUS	므	ION (START/RESUME)	WATER SHUT-OFF
Date of work competion.	COMMINGLE PRODUCING FORMATION		TION OF WELL SITE	OTHER: Extension
	CONVERT WELL TYPE		ETE - DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR C	OMPLETED OPERATIONS. Clearly show a	ill pertinent details i	ncluding dates, depths, volur	nes, etc.
Operator respectfully requ	uests to extend approval for the	subject locat	on for one year.	
,				
	_	صطفينا الم		
	Appro	ved by the Division of		
	Utan I	and Minir	na	
	Oil, Gas	s and min	<b>'</b> 9	
			. —	
	Date: 💍	5-21-9	34	
	2	March	$\mathcal{N}$	
	By:	MAN AND AND AND AND AND AND AND AND AND A	<u>xx</u>	and the same of th
			<b>.</b>	COPY SENT TO OPERATOR Orde: 5-22-07
		-		minos PM
_				S. Agricultura and the second
NAME (DI EASE PRINT) William A	A Ryan	<u>-</u>	ITLE Agent	
NAME (PLEASE PRINT)				
SIGNATURE UUlle	on a lyan		5/14/2007	

RECEIVED MAY 2 1 2007

(This space for State use only)

#### Application for Permit to Drill Request for Permit Extension Validation

(this form should accompany the Sundry Notice requesting permit extension)

API:

4304737476

Vell Name: North Horseshoe 13-2-6-21  Location: Section 2 Township 6 South, Range 21 East SWSW  Company Permit Issued to: The Houston Exploration Company	
Date Original Permit Issued: 6/29/2006  The undersigned as owner with legal rights to drill on the property a above, hereby verifies that the information as submitted in the prev	as permitted
approved application to drill, remains valid and does not require rev	vision.
Following is a checklist of some items related to the application, where items related to the application, where items related to the application of the control of the con	nich should be
f located on private land, has the ownership changed, if so, has the agreement been updated? Yes⊡No☑	e surface
Have any wells been drilled in the vicinity of the proposed well which he spacing or siting requirements for this location? Yes□ No☑	ch would affect
Has there been any unit or other agreements put in place that could permitting or operation of this proposed well? Yes□No☑	d affect the
Have there been any changes to the access route including owners of-way, which could affect the proposed location? Yes□No ☑	ship, or right-
Has the approved source of water for drilling changed? Yes□No☑	1
Have there been any physical changes to the surface location or activities which will require a change in plans from what was discussed at the evaluation? Yes□No☑	ccess route e onsite
s bonding still in place, which covers this proposed well? Yes ☑ No	
William a Pyo 5/14/2007	
Signature Date	
Title: Agent	
Representing: The Houston Exploration Company	RECEIVED
	MAY 2 1 2007

#### Division of Oil, Gas and Mining

### OPERATOR CHANGE WORKSHEET

ROUTING	
1. DJJ	I
2. CDW	l

	Change	of	Operator	(W	'ell	Sol	ld)
--	--------	----	----------	----	------	-----	-----

Change of Operator (Well Sold)				Λ-	Operato	r Merger		
The operator of the well(s) listed below has chan	ged, ε	effectiv	/e:			6/1/2007		
FROM: (Old Operator):				TO: ( New O	perator):			
N2525 - The Houston Exploration Company	N6965-Forest Oil Corporation							
1100 Louisiana, Suite 2000				707 17t	h St, Suite	3600		
Houston, TX 77002				Denver	, CO 80202			
Phone: 1-(713) 830-6800				Phone: 1 (303)	812-1755			
CA No.				Unit:				
WELL NAME	SEC	TWN	RNG	API NO	ENTITY	LEASE	WELL	WELL
SEE ATTACHED LIST			1		NO	TYPE	TYPE	STATUS
SLE ATTACHED LIST			i				<u> </u>	
OPERATOR CHANGES DOCUMENT.	ATI	ON						
Enter date after each listed item is completed								
1. (R649-8-10) Sundry or legal documentation wa	s rece	eived f	rom the	FORMER ope	rator on:	7/30/2007		
2. (R649-8-10) Sundry or legal documentation wa	s rece	eived f	rom the	NEW operator	on:	7/30/2007	•	
3. The new company was checked on the <b>Departr</b>	nent	of Cor	nmerce	, Division of Co	orporations	Database or	1:	7/31/2007
4a. Is the new operator registered in the State of U				Business Numb	_	571171-0143		
4b. If NO, the operator was contacted contacted o	n:						•	
5a. (R649-9-2)Waste Management Plan has been re		d on:		IN PLACE				
5b. Inspections of LA PA state/fee well sites compl					•			
5c. Reports current for Production/Disposition & S				YES	•			
6. Federal and Indian Lease Wells: The BL			a RIA h		margar no	ma ahanaa		
or operator change for all wells listed on Federa							DIA	
7. Federal and Indian Units:	11 ()1 1.	iiuiaii i	icases o	и.	BLM	. 7/31/2007	BIA	•
The BLM or BIA has approved the successor	ofun	it oner	ator for	walls listed on:		n/o		
8. Federal and Indian Communization Agi		-				n/a	•	
The BLM or BIA has approved the operator f						n/a		
9. Underground Injection Control ("UIC"				vision has appro	ved UIC Fo		er of Au	thority to
Inject, for the enhanced/secondary recovery un						=	n/a	caroffly to
DATA ENTRY:	u proj	1001 10	i the wa	ter disposar wer	1(3) 113104 0			•
1. Changes entered in the Oil and Gas Database	on:			8/27/2007				
2. Changes have been entered on the <b>Monthly Op</b>		r Cha	nge Sp			8/27/2007		
3. Bond information entered in RBDMS on:				8/27/2007			•	
4. Fee/State wells attached to bond in RBDMS on	:			8/27/2007				
5. Injection Projects to new operator in RBDMS o				n/a				
6. Receipt of Acceptance of Drilling Procedures for	or AP	D/Nev	v on:		7/30/2007			
BOND VERIFICATION:								
1. Federal well(s) covered by Bond Number:				6236351				
2. Indian well(s) covered by Bond Number:				n/a				
3a. (R649-3-1) The <b>NEW</b> operator of any fee well					•	6218963		
3b. The <b>FORMER</b> operator has requested a release	of li	ability	from th	eir bond on:	not yet			
LEASE INTEREST OWNER NOTIFIC	<u>۸ ۳۲</u> ۲	ONI-						
4. (R649-2-10) The <b>FORMER</b> operator of the fee			on comb	otod and info	od b 1-4	on fuera at . T	dedate	
of their responsibility to notify all interest owner					1ed by a let	ler from the D	ivision	
COMMENTS:	OI II	110 0110	uigo OII.		3/1/2007			

#### STATE OF UTAH

	DEPARTMENT OF NATURAL R DIVISION OF OIL, GAS AN		5. LEASE DESIGNATION AND SERIAL NUMBER:  See Attached List
SUNDRY	NOTICES AND REP	ORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill r		below current bottom-hole depth, reenter plugged wells, o	7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL	GAS WELL 01	THER	WELL NAME and NUMBER:     See Attached List
2. NAME OF OPERATOR:	NIQIE		9. API NUMBER:
Forest Oil Corporation  3. ADDRESS OF OPERATOR:	N6965	PHONE NUMBER:	Various  10. FIELD AND POOL, OR WILDCAT:
707 17th Street, #3600	Y Denver, STATE CO	O <sub>ZIP</sub> 80202 (303) 812-1755	
LOCATION OF WELL     FOOTAGES AT SURFACE: See a	ttached list		COUNTY:
QTR/QTR, SECTION, TOWNSHIP, RAN	NGE, MERIDIAN:		STATE: UTAH
11. CHECK APP	ROPRIATE BOXES TO INI	DICATE NATURE OF NOTICE, RE	PORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
OUROSOUS NE PEROPE	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
✓ SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
Date of work completion:	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
	COMMINGLE PRODUCING FORM		✓ OTHER: Change of Operator
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMA	
		how all pertinent details including dates, depths, v	7.010
N-2525) to Forest Oil Cor	poration (N-6965). Forest r	e attached list of Utah wells from The merged with The Houston Exploration will continue to be contract operate	on Company, a copy of the merger
•	new operator, accepts all a fucted on the lease or portion	pplicable terms, conditions, stipulation of the lease described.	tions and restrictions concerning
Forest Oil Corporation me	ets the State of Utah bondi	ng requirements under Safeco bon	d #6218963.
Please send all future cor	respondence to Forest Oil (	Corporation at the above listed add	ress.
Forest Oil Corporation, 70	97 17th Street, Suite #3600,	Denver, CO 80202	
10/11			
40 Ilm		7	-5-07
J. C. Ridens, Senior Vice	President - Western Region	າ 	Date
NAME (PLEASE PRINT) Joanne C	. Hresko	TITLE Vice Preside	nt & General Mgr Northern Division
SIGNATURE DAM	u C. Sheshi-	DATE 7-5.	07
(This space for State use only)		All wells with	LAPD OF New RECEIVED
APPROVED	8127101	status	RECEIVED
(5/2000) Carlene 1	Cussell	(See Instructions on Reverse Side)	JUL 3 0 2007
Division of Oil, Gas Earlene Russell, Eng	and Mining ineering Technician		DIN OF OIL CAS & MAINO

DIN UE UIT CVC & FINING

wmp

well name	sec	twp rng	or	api	entity	lease	well	stat	flag
HORSESHOE BEND 16-33	33			4304736214	Circley	Federal		APD	1145
HORSESHOE BEND 3-33	33			4304736215		Federal	OW	APD	
N HORSESHOE 7-16-6-21	16		<del></del> +	4304737438		State	GW	APD	С
N HORSESHOE 9-16-6-21	16			4304737439		State	GW	APD	C
N HORSESHOE 15-16-6-21	16			4304737440		State	GW	APD	C
N HORSESHOE 11-16-6-21	16		$\rightarrow$	4304737441		State	GW	APD	C
N HORSESHOE 1-16-6-21	16			4304737442		State	GW	APD	C
N HORSESHOE 13-2-6-21	02			4304737476		State	GW	APD	C
N HORSESHOE 15-2-6-21	02		_	4304737477		State	GW	APD	C
GUSHER 2-2-6-19	02			4304737561		State	OW	APD	C
GUSHER 16-2-6-19	02		ightharpoonup	4304737562		State	OW	APD	C
GUSHER 1-2-6-19	02		_	4304737563		State	OW	APD	С
GUSHER 3-2-6-19	02		_	4304737568		State	OW	APD	С
E COYOTE 6-2-8-25	02		_	4304737572		State	GW	APD	C
E COYOTE 3-2-8-25	02	<del></del>	$\overline{}$	4304737573		State	GW	APD	C
E COYOTE 8-2-8-25	02	080S 25	0E	4304737574		State	GW	APD	С
N HORSESHOE 13-16-6-21	16			4304737575		State	GW	APD	C
	02			4304737882		State	GW	APD	C
E COYOTE 14-2-8-25	02	080S 250	0E	4304737883		State	GW	APD	C
	02			4304737884		State	GW	APD	C
E COYOTE 16-2-8-25	02		_	4304737885		State	GW	APD	С
	02			4304737886		State	GW	APD	С
N HORSESHOE 16-18-6-22	18			4304737887	-	Federal	GW	APD	C
	18			4304737888		Federal	GW	APD	C
N HORSESHOE 2-18-6-22	18			4304737889		Federal	GW	APD	С
N HORSESHOE 10-18-6-22	18			4304737890		Federal	GW	APD	C
N HORSESHOE 8-18-6-22	18	060S 220	0E	4304737891		Federal	GW	APD	С
N HORSESHOE 13-15-6-21	15	060S 210	0E	4304738013		Federal	GW	APD	С
N HORSESHOE 15-15-6-21	15	060S 210	0E	4304738014		Federal	GW	APD	С
N HORSESHOE 11-15-6-21	15	060S 210	0E	4304738015		Federal	GW	APD	C
N HORSESHOE 9-15-6-21	15	060S 210	0E	4304738016		Federal	GW	APD	С
N HORSESHOE 5-15-6-21	15	060S 210	0E	4304738017		Federal	GW	APD	C
N HORSESHOE 3-15-6-21	15	060S 210	0E	4304738018		Federal	GW	APD	С
N HORSESHOE 5-20-6-22	20	060S 220	0E	4304738019		Federal	GW	APD	С
N HORSESHOE 13-20-6-22	20	060S 220	0E	4304738020		Federal	GW	APD	С
N HORSESHOE 3-20-6-22	20	060S 220	0E	4304738021		Federal	GW	APD	C
N HORSESHOE 7-20-6-22	20	060S 220	0E	4304738022		Federal	GW	APD	C
N HORSESHOE 11-20-6-22	20	060S 220	0E	4304738023		Federal	GW	APD	С
N HORSESHOE 2-12-6-21	12	060S 210	0E	4304738198		Federal	GW	APD	С
N HORSESHOE 14-12-6-21	12	060S 210	0E	4304738199		Federal	GW	APD	С
N HORSESHOE 10-12-6-21	12	060S 210	0E	4304738200		Federal	GW	APD	С
N HORSESHOE 8-12-6-21	12	060S 210	0E	4304738201		Federal	GW	APD	С
N HORSESHOE 16-13-6-21	13	060S 210	0E	4304738202		Federal	GW	APD	C
N HORSESHOE 15-17-6-22	17	060S 220	0E	4304738203		Federal	GW	APD	C
N HORSESHOE 5-19-6-22	19	060S 220	0E	4304738204		Federal	GW	APD	С
	19		$\overline{}$	4304738205			GW		С
	21	060S 220	0E	4304738206			GW	APD	С
the state of the s	21	060S 220	0E	4304738207		Federal	GW	APD	C
	21	060S 220	0E	4304738208		Federal	GW	APD	С
	21			4304738209			GW	APD	С
				4304738210		Federal	GW	APD	С
	19		_	4304738271				APD	С
N HORSESHOE 5-16-6-22	16	060S 22	0E	4304738406		State	GW	APD	

well name	sec	twp	rng	api	entity	lease	well	stat	flag
TWELVEMILE WASH 11-13-5-20	13			4304738437	CILLLY	Federal	GW	APD	C
TWELVEMILE WASH 1-15-5-20	15			4304738438		Federal	GW	APD	C
N HORSESHOE 4-33-5-21	33			4304738439		Federal	GW	APD	C
GUSHER 6-15-6-19	15			4304738440		Federal	GW	APD	C
HORSESHOE BEND W 9-34-6-20	34			4304738441		Federal	GW	APD	C
N HORSESHOE 16-12-6-21	12		<u> </u>	4304738442		Federal	GW	APD	C
N WALKER HOLLOW 12-29-6-23	29			4304738443		Federal		APD	C
N WALKER HOLLOW 10-30-6-23	30			4304738444		Federal	<del></del>	APD	C
PELICAN LAKE 11-3-8-20	03			4304738445		Federal		APD	C
PELICAN LAKE 8-4-8-20	04	1		4304738446		Federal	GW	APD	C
E COYOTE 10-3-8-25	03			4304738447		Federal		APD	C
BORDER 10-9-8-25	09			4304738448		Federal	GW	APD	C
N WALKER HOLLOW 14-33-6-23	33			4304738455		Federal	GW	APD	C
SNAKE JOHN WASH 14-11-7-25	11			4304738456		Federal	GW	APD	C
SNAKE JOHN WASH 4-24-7-25	24			4304738457		Federal	GW	APD	C
SQUAW RIDGE 1-26-7-25	26			4304738458		Federal	GW	APD	C
SQUAW RIDGE 13-28-7-25	28			4304738459		Federal	GW	APD	C
SQUAW RIDGE 16-30-7-25	30			4304738460		Federal	GW	APD	C
SQUAW RIDGE 14-16-7-25	16			4304738461		State	GW	APD	C
GUSHER 13-11-5-19	11			4304738462		State	GW	APD	C
N HORSESHOE 1-15-6-21	15			4304738831		Federal	GW	APD	C
N HORSESHOE 16-9-6-22	09			4304739083		State	GW	APD	_
N HORSESHOE 12-7-6-22	07			4304739084		State	GW	APD	
N HORSESHOE 14-10-6-22	10			4304739085		State	GW	APD	
N HORSESHOE 2-15-6-22	15			4304739086		State	GW	APD	
N WALKER HOLLOW 12-32-6-23	32			4304739087		State	GW	APD	
N WALKER HOLLOW 10-32-6-23	32			4304739088		State	GW	APD	
N WALKER HOLLOW 16-32-6-23	32			4304739089		State	GW	APD	
N WALKER HOLLOW 8-32-6-23	32			4304739090		State		APD	
N WALKER HOLLOW 11-36-6-23	36	1.		4304739091		State		APD	
N WALKER HOLLOW 13-36-6-23	36			4304739092		State		APD	
N WALKER HOLLOW 14-32-6-23	32			4304739093		State		APD	
N WALKER HOLLOW 15-36-6-23				4304739094		State		APD	
N HORSESHOE 4-15-6-22				4304739095		State		APD	
N HORSESHOE 9-10-6-21	10			4304739284		Federal			С
N HORSESHOE 12-13-6-21	13			4304739285		Federal			
N HORSESHOE 7-15-6-21	15	060S	210E	4304739286		Federal	GW	APD	
N HORSESHOE 9-19-6-22	19	060S	220E	4304739287		Federal	GW	APD	
N HORSESHOE 13-19-6-22	19	060S	220E	4304739288		Federal		<u> </u>	
N HORSESHOE 11-19-6-22				4304739289		Federal	GW	APD	
SQUAW RIDGE 16-13-7-24	13	070S	240E	4304739319		Federal	GW	APD	С
N HORSESHOE 16-7-6-22	07	060S	220E	4304739320		Federal	GW	APD	С
SQUAW RIDGE 8-16-7-25	16	070S	250E	4304738024		State		NEW	С

## STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

#### Request to Transfer Application or Permit to Drill

(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

Well name:	N Horseshoe 13-2-6-21		
API number:	4304737476		
Location:	Otr-Otr: SWSW Section: 2	Township: 6S	Range: 21E
Company that filed original application:	The Houston Exploration Company		
Date original permit was issued:	06/29/2006		
Company that permit was issued to:	The Houston Exploration Company		

Check one	Desired Action:
	Transfer pending (unapproved) Application for Permit to Drill to new operator
	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
✓	Transfer approved Application for Permit to Drill to new operator
	The undersigned as owner with legal rights to drill on the property as permitted, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.	Yes	No
If located on private land, has the ownership changed?		<b>✓</b>
If so, has the surface agreement been updated?		
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?		1
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?		<b>✓</b>
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?		<b>√</b>
Has the approved source of water for drilling changed?		✓
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?		<b>√</b>
Is bonding still in place, which covers this proposed well? Bond No. 6218963	1	

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Tami Hofmann	Title Regulatory Specialist
Signature Jami Holmann	Date 08/02/2007
Representing (company name) Forest Ol Corporation	

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

## STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

1	5. LEASE DESIGNATION AND SERIAL NUMBER: ML-47549		
SUNDRY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for proposals to drill no drill horizontal la	or to NA		
1. TYPE OF WELL OIL WELL	GAS WELL 🗹 OTHER _		8. WELL NAME and NUMBER: North Horseshoe 13-2-6-21
2. NAME OF OPERATOR:		<del>"</del> ,	9. API NUMBER:
Forest Oil Corporation		PHONE NUMBER:	4304737476  10. FIELD AND POOL, OR WILDCAT:
3. ADDRESS OF OPERATOR: 707 17th ST Suite 3600 CITY	Denver STATE CO ZIP	80202 (303) 812-170	
4. LOCATION OF WELL  FOOTAGES AT SURFACE: 781' F3			соилту: <b>Uintah</b>
QTR/QTR, SECTION, TOWNSHIP, RAN		1E	STATE: UTAH
11. CHECK APPR	ROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, R	EPORT, OR OTHER DATA
TYPE OF SUBMISSION	T	TYPE OF ACTION	
[7] NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
NOTICE OF INTENT (Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
Date of work completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	✓ other: Extension
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORM	ATION
	$\sim$ $\sim$ $\sim$	ension for the subject locati e	
NAME (PLEASE PRINT) Ginger Bo	wden	TITLE Agent	
SIGNATURE CHICAGO	Bouden	DATE 4/16/2008	
(This space for State use only)			

RECEIVED

#### Application for Permit to Drill Request for Permit Extension Validation

(this form should accompany the Sundry Notice requesting permit extension)

	4304737476		
	North Horseshoe 13		
	· -	6 South Range 21 East SW	
	nit issued to: Permit Issued:	Forest Oil Corporation (Ho 6/29/2006	uston Exploration Co)
above, hereby	verifies that the	n legal rights to drill on t information as submitte mains valid and does n	
Following is a coverified.	checklist of some	e items related to the ap	oplication, which should be
	ivate land, has t n updated? Yes	he ownership changed, □No☑	if so, has the surface
		the vicinity of the proposition? Ye	sed well which would affect es ☐ No ☑
	<b>Y</b>	er agreements put in pla roposed well? Yes⊟ N	ace that could affect the o☑
	•	to the access route incloroposed location? Yes	uding ownership, or right- □ No ☑
Has the approv	ed source of wa	iter for drilling changed	? Yes□No☑
	re a change in p	changes to the surface blans from what was dis	location or access route cussed at the onsite
Is bonding still	in place, which o	covers this proposed we	ell? Yes⊠No⊟
Amae	Bowder	<u> </u>	4/16/2008
Signature 0			Date
Title: Agent			
Representing:	Forest Oil Corpora	ation	

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APR 2 8 2008



Lieutenant Governor

### State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA Division Director

June 18, 2009

Forest Oil Corporation 707 17<sup>th</sup> Street, Suite 3600 Denver, CO 80202

Re:

APD Rescinded – N Horseshoe 13-2-6-21, Sec. 2, T.6S, R.21E

Uintah County, Utah API No. 43-047-37476

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on June 29, 2006. On May 21, 2007 and April 29, 2008 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective June 18, 2009.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

**Environmental Scientist** 

Well File cc:

SITLA, Ed Bonner

